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## Advanced Search:

Inspec - 1969 to date (INZZ)

init

Search history:

No.	Database	Search term	Info added since	Results	
1	INZZ	magnetoresistive OR magnetoresistance OR MR OR GMR	unrestricted	45714	<a href="#">show titles</a>
2	INZZ	gate ADJ electrode	unrestricted	2068	<a href="#">show titles</a>
3	INZZ	1 AND 2	unrestricted	22	<a href="#">show titles</a>
4	INZZ	active ADJ region	unrestricted	7618	<a href="#">show titles</a>
5	INZZ	1 AND 4	unrestricted	20	<a href="#">show titles</a>
6	INZZ	2 AND 4	unrestricted	5	<a href="#">show titles</a>
7	INZZ	5 AND 6	unrestricted	0	-
8	INZZ	sensitive ADJ region	unrestricted	256	<a href="#">show titles</a>
9	INZZ	1 AND 8	unrestricted	4	<a href="#">show titles</a>
10	INZZ	2 AND 8	unrestricted	0	-

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Information added since:  or:

Select special search terms from the following list(s):

- ☐ Publication year
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- ☐ Inspec thesaurus - browse headings H-Q
- ☐ Inspec thesaurus - browse headings R-Z
- ☐ Inspec thesaurus - enter a term
- ☐ Classification codes A: Physics, 0-1
- ☐ Classification codes A: Physics, 2-3
- ☐ Classification codes A: Physics, 4-5
- ☐ Classification codes A: Physics, 6
- ☐ Classification codes A: Physics, 7
- ☐ Classification codes A: Physics, 8
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- ☐ Classification codes B: Electrical & Electronics, 6-9
- ☐ Classification codes C: Computer & Control
- ☐ Classification codes D: Information Technology
- ☐ Classification codes E: Mech., Manufac. & Production Engineering
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## Advanced Search:

Inspec - 1969 to date (INZZ)

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8	INZZ	sensitive ADJ region	unrestricted	256	<a href="#">show titles</a>
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10	INZZ	2 AND 8	unrestricted	0	-
11	INZZ	valence AND conductive AND carrier ADJ density	unrestricted	3	<a href="#">show titles</a>
12	INZZ	valence AND conduction AND carrier ADJ density	unrestricted	377	<a href="#">show titles</a>
13	INZZ	1 AND 12	unrestricted	35	<a href="#">show titles</a>
14	INZZ	1 AND 12	unrestricted	35	<a href="#">show titles</a>
15	INZZ	ferromagnetic AND paramagnetic	unrestricted	8830	<a href="#">show titles</a>
16	INZZ	1 AND 15	unrestricted	934	<a href="#">show titles</a>
17	INZZ	2 AND 16	unrestricted	0	-

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Information added since:  or: 

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Select special search terms from the following list(s):

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- ☐ Inspec thesaurus - browse headings R-Z
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- ☐ Classification codes A: Physics, 2-3
- ☐ Classification codes A: Physics, 4-5
- ☐ Classification codes A: Physics, 6
- ☐ Classification codes A: Physics, 7
- ☐ Classification codes A: Physics, 8
- ☐ Classification codes A: Physics, 9
- ☐ Classification codes B: Electrical & Electronics, 0-5
- ☐ Classification codes B: Electrical & Electronics, 6-9
- ☐ Classification codes C: Computer & Control
- ☐ Classification codes D: Information Technology
- ☐ Classification codes E: Mech., Manufac. & Production Engineering
- ☐ Treatment codes
- ☐ Inspec sub-file
- ☐ Language of publication
- ☐ Publication types

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## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"5416353".pn.	US-PGPUB; USPAT	OR	OFF	2006/02/20 22:41
L2	303118	(control\$5).clm.	US-PGPUB	OR	ON	2006/02/20 22:42
L3	114949	(chang\$5).clm.	US-PGPUB	OR	ON	2006/02/20 22:42
L4	102653	(adjust\$5).clm.	US-PGPUB	OR	ON	2006/02/20 22:42
L5	40	(stripe adj height).clm.	US-PGPUB	OR	ON	2006/02/20 22:42
L6	167752	(active region).clm.	US-PGPUB	OR	ON	2006/02/20 22:42
L7	3508	(active adj region).clm.	US-PGPUB	OR	ON	2006/02/20 22:42
L8	115	(sensitive adj region).clm.	US-PGPUB	OR	ON	2006/02/20 22:44
L9	176931	(size width height depth narrowed widened).clm.	US-PGPUB	OR	ON	2006/02/20 22:43
L10	117338	(2 3 4) and (5 6 7 8 9)	US-PGPUB	OR	ON	2006/02/20 22:43
L11	14671	(2 3 4) and (9) and (5 6 7 8)	US-PGPUB	OR	ON	2006/02/20 22:44
L12	405	(2 3 4) and (9) and (5 7 8)	US-PGPUB	OR	ON	2006/02/20 22:44
L13	3224	(MR magnetoresist\$5 GMR SVMR TMR TJMR).clm.	US-PGPUB	OR	ON	2006/02/20 22:44
L14	13	12 and 13	US-PGPUB	OR	ON	2006/02/20 22:44

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	12	(US-20040061980-\$ or US-20040218499-\$ or US-20050117263-\$ or US-20050230676-\$ or US-20040183132-\$.did. or (US-6952328-\$ or US-6697235-\$ or US-6693299-\$ or US-5650338-\$.did. or (JP-2004128085-\$.did. or (JP-2000031298-\$ or US-20050184285-\$.did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2006/02/20 22:15
S1	282	(360/313).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/19 18:19
S2	617	(360/324.12).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:07
S3	209	(360/324).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/19 18:19
S4	132	(360/320).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/19 18:19
S5	1186	S2 S1 S3 S4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/19 18:25
S6	41	S5 and gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/19 18:25
S7	7510148	control\$5	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:07



## EAST Search History

S8	4272927	chang\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:07
S9	7465860	size volume area width length depth	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:08
S10	1429174	(S7 S8) with S9	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:08
S11	1074076	narrow\$4 widen\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:09
S12	2241413	active sensitive	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:09
S13	6539899	region zone area element	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:09
S14	2260754	S10 S11	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:09
S15	201413	S12 near3 S13	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:10
S16	10002	S14 with S15	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:10
S17	2596161	voltage potential	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:10

## EAST Search History

S18	1175	S16 same S17	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:10
S19	82685	MR magnetoresist\$5	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:11
S20	7	S18 same S19	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:12
S21	161515	gate adj3 electrode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:12
S22	89	S18 same S21	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:30
S23	183180	("360"/\$ "369"/\$ "720"/\$ 29/603\$).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:30
S24	1603309	semiconductor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:30
S25	1445372	magnetic (magnetism near2 sensitive)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:30
S26	6980	S23 and S24 and S25	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:30
S27	3236	S23 and S24 same S25	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:39

## EAST Search History

S28	1779	chalcopyrite	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:39
S29	1	S27 and S28	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:39
S30	6	S26 and S28	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:42
S31	159378	gate adj2 electrode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:43
S32	9540	S31 with "26"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:43
S33	24835	S31 same S12	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:43
S34	15328	S31 same (S12 with S13)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:45
S35	2508	S17 same S34	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 12:45
S36	810	(S7 S8) same S35	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 18:20
S37	824	valence and (conduction conductive) and (carrier near2 density)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 18:21

## EAST Search History

S38	541	"23" and S37	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 18:21
S39	183180	("360"/\$ "369"/\$ "720"/\$ 29/603\$).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 18:21
S40	7	S39 and S37	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 18:39
S41	26	("6373667" "6230389" "6496333" "6449131" "6430015" "6310751" "6230690" "5783460" "5684568" "5653013" "5546254" "5079831" "6204071").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/20 18:40
S42	13	("6373667" "6230389" "6496333" "6449131" "6430015" "6310751" "6230690" "5783460" "5684568" "5653013" "5546254" "5079831" "6204071").pn.	USPAT	OR	OFF	2006/02/20 18:47
S43	3	("5251088" "6934133").pn. ("20020135948").did.	US-PGPUB; USPAT	OR	OFF	2006/02/20 18:48

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Set	Items	Description
S1	111553	(MAGNET? OR MR OR GMR OR GIANT()MAGNETORESISTANCE) (3N) (HEAD?? OR ELEMENT?? OR SENSOR?? OR SENSING OR SENSITIVE OR ACTIVE OR TRANSDUCER??)
S2	2594	STRIPE??() (WIDTH?? OR HEIGHT OR AREA?? OR SIZE?? OR VOLUME?? OR DEPTH OR PORTION?? OR REGION?? OR ZONE??)
S3	259	(CONTROL? OR CHANGE?? OR CHANGING OR WIDEN??? OR NARROW??? OR MODIFY??? OR MODIFY? OR REDUCE?? OR REDUCING OR SHRINK???) - (3N)S2
S4	375878	STACK??? OR (PLURAL? OR MANY OR MULTIPLE?? OR MANY OR SEVERAL OR MULTI OR NUMEROUS OR SUBSTRATE) (3N)LAYER??
S5	33997	AU=(HANEDA, S? OR HANEDA S? OR OSAWA, Y? OR OSAWA Y? OR NAKAMURA, S? OR NAKAMURA S?)
S6	390	(GATE()ELECTRODE??) (3N)VOLT????
S7	0	S1(3N)S3
S8	15	S1(3N)S2
S9	0	S8(3N)S4
S10	0	S8 AND S4
S11	4	RD S8 (unique items)
S12	0	S3(3N)S6
S13	2	S2(3N)S4
S14	2	S13 NOT S11
S15	130	S1(3N)S4
S16	0	S15(3N)S6

S17	0	S15 AND S6
S18	1	S15 AND S2
S19	1	S18 NOT (S11 OR S14)
S20	0	S3(3N)S4
S21	9	S3 AND S4
S22	5	RD (unique items)
S23	3	S22 NOT (S11 OR S14 OR S19)
S24	0	S3 AND S5
S25	1	S2 AND S5
S26	1	S25 NOT (S11 OR S14 OR S19 OR S23)
S27	1	S15 AND S5
S28	1	S27 NOT (S11 OR S14 OR S19 OR S23 OR S26)
S29	329	S4 AND S5
S30	0	S29(3N)S6
S31	0	S29(3N)S2

11/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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08709273 INSPEC Abstract Number: B2003-09-3120J-014

**Title: Directional sensitivity of GMR element and its industrial applications**

Author(s): Wakiwaka, H.; Kataoka, Y.; Shinoura, O.

Author Affiliation: Fac. of Eng., Shinshu Univ., Nagano, Japan

Journal: International Journal of Applied Electromagnetics and Mechanics

Conference Title: Int. J. Appl. Electromagn. Mech. (Netherlands) vol.15, no.1-4 p.89-96

Publisher: IOS Press,

Publication Date: 2001-2002 Country of Publication: Netherlands

CODEN: IJAMFO ISSN: 1383-5416

SICI: 1383-5416(2001/2002)15:1/4L.89:DSEI;1-X

Material Identity Number: E313-2003-003

U.S. Copyright Clearance Center Code: 1383-5416/02/\$8.00

Conference Title: Tenth International Symposium on Applied Electromagnetics and Mechanics. ISEM-Tokyo

Conference Date: 13-16 May 2001 Conference Location: Tokyo, Japan

Language: English

Subfile: B

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...Abstract: elements are generally used to detect the magnetic field impressed in the direction of the **stripe width**. However, the **GMR element** has high sensitivity in the direction of the length as well as the width, even...

11/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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06408753 INSPEC Abstract Number: B9612-3120B-063

**Title: Submicron trackwidth and stripe height MR sensor test structures**

Author(s): Fontana, R.E., Jr.; MacDonald, S.A.; Ching Tsang; Tsann Lin

Author Affiliation: IBM Res. Div., Almaden Res. Center, San Jose, CA, USA

Journal: IEEE Transactions on Magnetics Conference Title: IEEE Trans. Magn. (USA) vol.32, no.5, pt.1 p.3440-2

Publisher: IEEE,

Publication Date: Sept. 1996 Country of Publication: USA

CODEN: IEMGAQ ISSN: 0018-9464

SICI: 0018-9464(199609)32:5:1L.3440:STSH;1-3

Material Identity Number: I101-96007

U.S. Copyright Clearance Center Code: 0018-9464/96/\$05.00

Conference Title: 1996 IEEE International Magnetics Conference (INTERMAG '96)

Conference Sponsor: Magn. Soc. IEEE

Conference Date: 9-12 April 1996 Conference Location: Seattle, WA, USA

Language: English

Subfile: B

Copyright 1996, IEE

**Title: Submicron trackwidth and stripe height MR sensor test structures**

11/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

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05123406 INSPEC Abstract Number: B9205-3120B-042

**Title: Micromagnetic track profile asymmetries in dual magnetoresistive heads**

Author(s): Nix, L.; Helms, C.; O'Connor, D.

Author Affiliation: Storage Technol. Corp., Louisville, CO, USA

Journal: IEEE Transactions on Magnetism vol.27, no.6, pt.2 p.4693-7

Publication Date: Nov. 1991 Country of Publication: USA

CODEN: IEMGAQ ISSN: 0018-9464

U.S. Copyright Clearance Center Code: 0018-9464/91/\$01.00

Conference Title: Fifth Joint Magnetism and Magnetic Materials-Intermag Conference

Conference Sponsor: AIP; IEEE

Conference Date: 18-21 June 1991 Conference Location: Pittsburgh, PA, USA

Language: English

Subfile: B

Abstract: An appropriate 3-D micromagnetic model of a shielded, finite **stripe height**, dual **element magnetoresistive (MR) head** is developed. It is shown that asymmetric bias profiles in the cross track direction arise...

**11/3,K/4 (Item 1 from file: 8)**

DIALOG(R)File 8: Ei Compendex(R)

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05944602 E.I. No: EIP01476741006

**Title: Effect of current density and stripe height on the amplitude of a dual-synthetic GMR head**

Author: Li, Y.

Corporate Source: Read-Rite Corporation, Milpitas, CA 95035, United States

Conference Title: 8th Joint Magnetism and Magnetic Materials -International Magnetic Conference- (MMM-Intermag)

Conference Location: San Antonio, TX, United States Conference Date: 20010107-20010111

E.I. Conference No.: 58692

Source: IEEE Transactions on Magnetism v 37 n 4 I July 2001. p 1695-1697

Publication Year: 2001

CODEN: IEMGAQ ISSN: 0018-9464

Language: English

Identifiers: **Stripe height ; Dual-synthetic magnetic heads**



14/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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06295238 INSPEC Abstract Number: A9614-4255P-050, B9607-4320J-183

**Title: An optimum design of buried heterostructure lasers with minimum threshold current using MEDICI**

Author(s): Hyeong Rae Kim; Kae Dal Kwack

Author Affiliation: Dept. of Electr. Eng., Hanyang Univ., Seoul, South Korea

Journal: Journal of the Korean Institute of Telematics and Electronics  
vol.33A, no.1 p.59-67

Publisher: Korea Inst. Telematics & Electron,

Publication Date: Jan. 1996 Country of Publication: South Korea

CODEN: CKNOEZ ISSN: 1016-135X

SICI: 1016-135X(199601)33A:1L:59:ODBH;1-K

Material Identity Number: N523-96010

Language: Korean

Subfile: A B

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...Abstract: InP current blocking layer are fixed to have minimum current leakage, then various simulations with **several** active **layer** thicknesses and **stripe widths** are performed. The stripe width with minimum threshold current varies with the active layer thickness...

14/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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04503029 INSPEC Abstract Number: A89133692, B89076702

**Title: Development and characterization of a planar double heterostructure laser diode and a stripe double heterostructure grown by MBE**

Author(s): Chi Yhou Hong; Tae Won Kang; Youn Hwan Lee; Gi Seok Eom; Deuk Young Kim; Kwan Soo Chung

Author Affiliation: Dept. of Phys., Dongguk Univ., Seoul, South Korea

Journal: New Physics (Korean Physical Society) vol.29, no.3 p. 299-304

Publication Date: June 1989 Country of Publication: South Korea

CODEN: NWPYA4 ISSN: 0374-4914

Language: Korean

Subfile: A B

...Abstract: by molecular beam epitaxy, and their properties have been investigated as a function of the **substrate** temperature, the active **layer** thickness and the **stripe width**. The optical quality of Al/sub x/Ga/sub 1-x/As layer was observed...

19/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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08479682 INSPEC Abstract Number: B2003-01-3120J-036, C2003-01-5320C-086

**Title: Thermally activated magnetic noise and spectra in GMR heads**

Author(s): Jian-Gang Zhu; Yuchen Zhou

Author Affiliation: Dept. of Electr. Eng., Carnegie Mellon Univ.,  
Pittsburgh, PA, USA

Conference Title: Intermag Europe 2002 Digest of Technical Papers. 2002

IEEE International Magnetism Conference (Cat.No.02CH37323) p.BP9

Publisher: IEEE, Piscataway, NJ, USA

Publication Date: 2002 Country of Publication: USA vii+513 pp.

ISBN: 0 7803 7365 0 Material Identity Number: XX-2002-01368

U.S. Copyright Clearance Center Code: 0-7803-7365-0/02/\$17.00

Conference Title: Intermag Europe 2002 Digest of Technical Papers. 2002

IEEE International Magnetism Conference

Conference Sponsor: Magnetic Soc. IEEE

Conference Date: 28 April-2 May 2002 Conference Location: Amsterdam,  
Netherlands

Language: English

Subfile: B C

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...Abstract: spin valve GMR heads. It is found that at  $W=200$  nm and a nominal **stripe height**, the noise spectra exhibits multiple resonance frequencies, indicating a spatial non-uniformity of the magnetization precessions over the free layer. At a slightly narrower track width and a reduced **stripe height**, the multimode feature reduces to a virtually single mode resonance. Micromagnetic simulation shows that increasing sensor **stripe height** significantly yields a significant increase of mag-noise level in the low frequency region. Detailed...

... presented in the paper on the multimode excitation conditions. Analysis on the head designs with **multiple sense layers** such as CPP/ **GMR head** is also presented.

...Identifiers: sensor **stripe height** ;

23/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2006 Institution of Electrical Engineers. All rts. reserv.

05893981 INSPEC Abstract Number: A9507-4260B-017, B9504-4320J-057

**Title: Monolithically integrated multi-wavelength MQW-DBR laser diodes fabricated by selective metalorganic vapor phase epitaxy**

Author(s): Sasaki, T.; Yamaguchi, M.; Kitamura, M.

Author Affiliation: Opto-Electron. Res. Labs., NEC Corp., Ibaraki, Japan

Journal: Journal of Crystal Growth vol.145, no.1-4 p.846-51

Publication Date: Dec. 1994 Country of Publication: Netherlands

CODEN: JCRGAE ISSN: 0022-0248

U.S. Copyright Clearance Center Code: 0022-0248/94/\$07.00

Conference Title: Seventh International Conference on Metalorganic Vapor Phase Epitaxy

Conference Date: 31 May-3 June 1994 Conference Location: Yokohama, Japan

Language: English

Subfile: A B

Copyright 1995, FIZ Karlsruhe

Abstract: Selective metalorganic vapor phase epitaxy (MOVPE) was used to grow InGaAsP/InP **layers** for fabricating **multi** -wavelength laser diodes. Multiple quantum well (MQW) active and passive waveguides were simultaneously grown by...

... the effective refractive index of the MQW passive waveguide at the DBR region can be **controlled** by the mask **stripe width** . This simple technique was used to fabricate multi-wavelength MQW-DBR laser diodes. In the...

23/3,K/2 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2006 Japan Science and Tech Corp(JST). All rts. reserv.

04929320 JICST ACCESSION NUMBER: 01A0803563 FILE SEGMENT: JICST-E

**AlGaInN-based high power lasers.**

TAKEYA MOTONOBU (1); TOJO TSUYOSHI (1); ASANO TAKEHARU (1); HINO TOMONORI (1); KIJIMA SATORU (1); GOTO OSAMU (1); UCHIDA SHIRO (1); IKEDA MASAO (1)

(1) Sonishiraishisemikondakuta Kaise

Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report (Institute of Electronics, Information and Communication Enginners), 2001, VOL.101,NO.113(LQE2001 16-30), PAGE.79-84, FIG.8, REF.11

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 621.375.826:621.315.592

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

...ABSTRACT: new laser structure that could suppress the generation of first-order transverse mode and by **narrowing** the ridge **stripe width** . Besides, the threshold current and slope efficiency were improved by introducing a GaInN inter- **layer** between a **multiple** -quantum well active **layer** and an AlGaN layer. The threshold current density was -3.5kA/cm2 and the slope...

23/3,K/3 (Item 1 from file: 95)

DIALOG(R)File 95:TEME-Technology & Management  
(c) 2006 FIZ TECHNIK. All rts. reserv.

00755343 I93116094320

**Selective metalorganic vapor phase epitaxial growth of InGaAsP/InP layers with bandgap energy control in InGaAs/InGaAsP multiple-quantum well structures**

(Selektives metallorganisches Gasphasenepitaxialwachstum von InGaAsP/InP mit Bandlueckenenergieregulierung in InGaAs/InGaAsP-Mehrfach-Quantentopfstrukturen)

Sasaki, T; Kitamura, M; Mito, I

Opto-Electron. Res. Labs., NEC Corp., Ibaraki, Japan

Journal of Crystal Growth, v132, n3-4, pp435-443, 1993

Document type: journal article Language: English

Record type: Abstract

ISSN: 0022-0248

**ABSTRACT:**

...MQW) ridge structures with crystallographically smooth side facets and flat interfaces are successfully obtained. By **changing** the mask **stripe width** the bandgap energy of the MQW structure is modified.

...IDENTIFIERS: SELECTIVE METALORGANIC VAPOR PHASE EPITAXIAL GROWTH; BANDGAP ENERGY CONTROL; PASSIVE WAVEGUIDE LAYERS; PHOTONIC DEVICES; OPEN **STRIPE REGIONS** ; **NARROW** GROWTH REGIONS; LAYER THICKNESSES; TOP SURFACE; FLAT GROWN SURFACE; SURFACE MIGRATED SPECIES; MIGRATION LENGTHS; CRYSTALLOGRAPHICALLY SMOOTH SIDE FACETS; FLAT INTERFACES; MASK STRIPE WIDTH ; MASK PATTERNED PLANAR INP **SUBSTRATE** ; INGAASP INP **LAYERS** ; Gasphasenepitaxie; Energieband

26/3,K/1 (Item 1 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2006 Institution of Electrical Engineers. All rts. reserv.

01405308 INSPEC Abstract Number: A72042093, B72023988

Title: **Very-low-current operation of mesa-stripe-geometry double-heterostructure injection lasers**

Author(s): Tsukada, T.; Nakashima, H.; Umeda, J.; Nakamura, S. ; Chinone, N.; Ito, R.; Nakada, O.

Author Affiliation: Hitachi, Ltd., Kokubunji, Tokyo, Japan

Journal: Applied Physics Letters vol.20, no.9 p.344-5

Publication Date: 1 May 1972 Country of Publication: USA

CODEN: APPLAB ISSN: 0003-6951

Language: English

Subfile: A B

Author(s): Tsukada, T.; Nakashima, H.; Umeda, J.; Nakamura, S. ; Chinone, N.; Ito, R.; Nakada, O.

...Abstract: been fabricated. Lasers of this geometry are made by etching the heterostructure layers, leaving a **stripe region** with a width ranging from 10 to 40  $\mu$  m. The current-spreading effect inherent...

28/3,K/1 (Item 1 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2006 INIST/CNRS. All rts. reserv.

10116521 PASCAL No.: 92-0322142

**Stacked optical disk drive for multimedia files**

**Optical memories**

NAKAMURA S ; SEYA E; SUKEDA H; MATSUMOTO K; NIIHARA T; NIHEI H; ICHIKAWA  
K; MITA S

Hitachi Ltd, central res. lab., Kokubunjl Tokyo 185, Japan

Journal: Japanese journal of applied physics, 1992, 31 (2B p.1) 625-629

Language: English

NAKAMURA S ; SEYA E; SUKEDA H; MATSUMOTO K; NIIHARA T; NIHEI H; ICHIKAWA  
K; MITA S

English Descriptors: Optical disk; Optical recording; Multimedia; **Stacking**  
; Drive mechanism; Optical **head** ; **Magneto-optical** disk

File 9:Business & Industry(R) Jul/1994-2006/Feb 23  
(c) 2006 The Gale Group  
File 15:ABI/Inform(R) 1971-2006/Feb 24  
(c) 2006 ProQuest Info&Learning  
File 16:Gale Group PROMT(R) 1990-2006/Feb 24  
(c) 2006 The Gale Group  
File 20:Dialog Global Reporter 1997-2006/Feb 24  
(c) 2006 Dialog  
File 47:Gale Group Magazine DB(TM) 1959-2006/Feb 23  
(c) 2006 The Gale group  
File 75:TGG Management Contents(R) 86-2006/Feb W2  
(c) 2006 The Gale Group  
File 80:TGG Aerospace/Def.Mkts(R) 1982-2006/Feb 23  
(c) 2006 The Gale Group  
File 88:Gale Group Business A.R.T.S. 1976-2006/Feb 17  
(c) 2006 The Gale Group  
File 98:General Sci Abs 1984-2004/Dec  
(c) 2005 The HW Wilson Co.  
File 112:UBM Industry News 1998-2004/Jan 27  
(c) 2004 United Business Media  
File 141:Readers Guide 1983-2004/Dec  
(c) 2005 The HW Wilson Co  
File 148:Gale Group Trade & Industry DB 1976-2006/Feb 23  
(c)2006 The Gale Group  
File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group  
File 275:Gale Group Computer DB(TM) 1983-2006/Feb 23  
(c) 2006 The Gale Group  
File 264:DIALOG Defense Newsletters 1989-2006/Feb 22  
(c) 2006 Dialog  
File 484:Periodical Abs Plustext 1986-2006/Feb W3  
(c) 2006 ProQuest  
File 553:Wilson Bus. Abs. 1982-2004/Dec  
(c) 2005 The HW Wilson Co  
File 570:Gale Group MARS(R) 1984-2006/Feb 23  
(c) 2006 The Gale Group  
File 608:KR/T Bus.News. 1992-2006/Feb 24  
(c)2006 Knight Ridder/Tribune Bus News  
File 620:EIU:Viewswire 2005/Oct 19  
(c) 2005 Economist Intelligence Unit  
File 613:PR Newswire 1999-2006/Feb 24  
(c) 2006 PR Newswire Association Inc  
File 621:Gale Group New Prod.Annou.(R) 1985-2006/Feb 23  
(c) 2006 The Gale Group  
File 623:Business Week 1985-2006/Feb 24  
(c) 2006 The McGraw-Hill Companies Inc  
File 624:McGraw-Hill Publications 1985-2006/Feb 24  
(c) 2006 McGraw-Hill Co. Inc  
File 634:San Jose Mercury Jun 1985-2006/Feb 23  
(c) 2006 San Jose Mercury News  
File 635:Business Dateline(R) 1985-2006/Feb 24  
(c) 2006 ProQuest Info&Learning  
File 636:Gale Group Newsletter DB(TM) 1987-2006/Feb 23  
(c) 2006 The Gale Group  
File 647:CMP Computer Fulltext 1988-2006/Mar W1  
(c) 2006 CMP Media, LLC  
File 696:DIALOG Telecom. Newsletters 1995-2006/Feb 23  
(c) 2006 Dialog  
File 674:Computer News Fulltext 1989-2005/Oct W2  
(c) 2005 IDG Communications  
File 810:Business Wire 1986-1999/Feb 28

(c) 1999 Business Wire  
 File 813:PR Newswire 1987-1999/Apr 30  
 (c) 1999 PR Newswire Association Inc  
 File 587:Jane's Defense&Aerospace 2006/Feb W3  
 (c) 2006 Jane's Information Group

Set	Items	Description
S1	159929	(MAGNET? OR MR OR GMR OR GIANT()MAGNETORESISTANCE) (3N) (HEAD?? OR ELEMENT?? OR SENSOR?? OR SENSING OR SENSITIVE OR ACTIVE OR TRANSDUCER??)
S2	654	STRIPE??() (WIDTH?? OR HEIGHT OR AREA?? OR SIZE?? OR VOLUME-?? OR DEPTH OR PORTION?? OR REGION?? OR ZONE??)
S3	56	(CONTROL? OR CHANGE?? OR CHANGING OR WIDEN??? OR NARROW??? OR MODIFY??? OR MODIFY? OR REDUCE?? OR REDUCING OR SHRINK???) - (3N)S2
S4	675671	STACK??? OR (PLURAL? OR MANY OR MULTIPLE?? OR MANY OR SEVERAL OR MULTI OR NUMEROUS OR SUBSTRATE) (3N)LAYER??
S5	384	AU=(HANEDA, S? OR HANEDA S? OR OSAWA, Y? OR OSAWA Y? OR NAKAMURA, S? OR NAKAMURA S?)
S6	92	(GATE()ELECTRODE??) (3N)VOLT????
S7	0	S3(3N)S4
S8	0	S3(3N)S6
S9	0	S2(3N)S4
S10	0	S2(3N)S6
S11	0	S2 AND S5
S12	6	S1(3N)S2
S13	3	RD (unique items)
S14	0	S1 AND S5



13/3,K/1 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2006 The Gale Group. All rts. reserv.

06346588 Supplier Number: 54653481 (USE FORMAT 7 FOR FULLTEXT)  
**Ultratech Introduces New-Generation Stepper Family for Advanced Thin-Film  
Head Production; XLS 9000-Series Platform Tailored for Advanced TFH  
Lithography.**  
Business Wire, p0106  
May 18, 1999  
Language: English Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 752

... stage, coupled with low-lens distortion, provides the colinearity  
needed to control the throat and **stripe height** of **GMR** thin film  
heads .  
The reticle library for the XLS 9000-series has been expanded to  
handle up to...

13/3,K/2 (Item 1 from file: 88)  
DIALOG(R)File 88:Gale Group Business A.R.T.S.  
(c) 2006 The Gale Group. All rts. reserv.

05934716 SUPPLIER NUMBER: 78966753  
**Effect of Current Density and Stripe Height on the Amplitude of a  
Dual-Synthetic GMR Head.**  
Li, Yufeng  
IEEE Transactions on Magnetism, 37, 4, 1695  
July, 2001  
ISSN: 0018-9464 LANGUAGE: English RECORD TYPE: Abstract

...AUTHOR ABSTRACT: height reduction as compared with current density  
enhancement.  
Index Terms--Amplitude, current density, dual-synthetic **GMR** head ,  
**stripe height** .

13/3,K/3 (Item 2 from file: 88)  
DIALOG(R)File 88:Gale Group Business A.R.T.S.  
(c) 2006 The Gale Group. All rts. reserv.

04222875 SUPPLIER NUMBER: 19264658  
**Submicron trackwidth and stripe height MR sensor test structures. (**  
**magnetoresistive ) (The 1996 IEEE International Magnetism**  
**Conference) (INTERMAG '96)**  
Fontana, Robert E., Jr.; MacDonald, Scott A.; Tsang, Ching; Lin, Tsann  
IEEE Transactions on Magnetism, v32, n5, p3440(3)  
Sep, 1996  
ISSN: 0018-9464 LANGUAGE: English RECORD TYPE: Abstract

**Submicron trackwidth and stripe height MR sensor test structures. (**  
**magnetoresistive ) (The 1996 IEEE International Magnetism**  
**Conference) (INTERMAG '96)**

File 344:Chinese Patents Abs Jan 1985-2006/Jan  
(c) 2006 European Patent Office  
File 347:JAPIO Nov 1976-2005/Oct(Updated 060203)  
(c) 2006 JPO & JAPIO  
File 350:Derwent WPIX 1963-2006/UD,UM &UP=200612  
(c) 2006 Thomson Derwent  
File 371:French Patents 1961-2002/BOPI 200209  
(c) 2002 INPI. All rts. reserv.

Set	Items	Description
S1	174347	(MAGNET? OR MR OR GMR OR GIANT()MAGNETORESISTANCE) (3N) (HEAD?? OR ELEMENT?? OR SENSOR?? OR SENSING OR SENSITIVE OR ACTIVE OR TRANSDUCER??)
S2	1397	STRIPE??() (WIDTH?? OR HEIGHT OR AREA?? OR SIZE?? OR VOLUME?? OR DEPTH OR PORTION?? OR REGION?? OR ZONE??)
S3	153	(CONTROL? OR CHANGE?? OR CHANGING OR WIDEN??? OR NARROW??? OR MODIFY??? OR MODIFY? OR REDUCE?? OR REDUCING OR SHRINK???) - (3N) S2
S4	454107	STACK??? OR (PLURAL? OR MANY OR MULTIPLE?? OR MANY OR SEVERAL OR MULTI OR NUMEROUS OR SUBSTRATE) (3N) LAYER??
S5	23497	AU=(HANEDA, S? OR HANEDA S? OR OSAWA, Y? OR OSAWA Y? OR NAKAMURA, S? OR NAKAMURA S?)
S6	2235	(GATE() ELECTRODE??) (3N) VOLT????
S7	8	S1 (3N) S3
S8	0	S7 (3N) S4
S9	0	S7 (3N) S6
S10	10	(S2 OR S3) AND S5
S11	10	S10 NOT S7
S12	4	S1(S) S2(S) S4
S13	4	S12 NOT (S7 OR S11)

7/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

08168268 \*\*Image available\*\*  
SENSOR STRIPE ENCAPSULATION LAYER IN READ/WRITE HEAD

PUB. NO.: 2004-281028 [JP 2004281028 A]  
PUBLISHED: October 07, 2004 (20041007)  
INVENTOR(s): BURBANK DANIEL PAUL  
HEIM KEVIN RICHARD  
APPLICANT(s): SEAGATE TECHNOLOGY LLC  
APPL. NO.: 2003-347014 [JP 2003347014]  
FILED: October 06, 2003 (20031006)  
PRIORITY: 03 387156 [US 2003387156], US (United States of America),  
March 12, 2003 (20030312)

ABSTRACT

... are free from chemical and mechanical damages resulting from the wrapping by producing a precisely **controlled stripe height**.

SOLUTION: A **magnetoresistive** read head has read head layers that are shaped to form an air bearing surface and a...

7/3,K/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

05467117 \*\*Image available\*\*  
THIN-FILM MAGNETIC HEAD SLIDER

PUB. NO.: 09-081917 [JP 9081917 A]  
PUBLISHED: March 28, 1997 (19970328)  
INVENTOR(s): KUMAKIRI MICHIO  
INOUE ATSUSHI  
YOSHITOMI YOSHIHISA  
TANIGUCHI YOSHINOBU  
APPLICANT(s): SANYO ELECTRIC CO LTD [000188] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 07-231576 [JP 95231576]  
FILED: September 08, 1995 (19950908)

ABSTRACT

... slider and to improve the yield of products by disposing marker layers for detecting the **change** in the **stripe height** of a **magnetoresistive element** layer by polishing of air bearing surface...

... layers 61, 62, 63 and the third marker layers 71, 72, 73 for detecting the **change** in the **stripe height** of the **MR element** layer 3 by the polishing of the air bearing surface 19. An electrode layer 4...

7/3,K/3 (Item 3 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

02076277 \*\*Image available\*\*  
MAGNETORESISTANCE EFFECT TYPE SENSOR

PUB. NO.: 61-290377 [JP 61290377 A]

PUBLISHED: December 20, 1986 (19861220)  
INVENTOR(s): HAYASHI HISANORI  
ABIKO SHUZO  
GOTO HIROICHI  
KUHARA MASAKAZU  
INOUE SHINICHI  
SANO HIDETO  
APPLICANT(s): CANON ELECTRONICS INC [365668] (A Japanese Company or  
Corporation), JP (Japan)  
APPL. NO.: 60-130792 [JP 85130792]  
FILED: June 18, 1985 (19850618)  
JOURNAL: Section: P, Section No. 578, Vol. 11, No. 156, Pg. 14, May  
21, 1987 (19870521)

ABSTRACT

...CONSTITUTION: **Magnetic** reluctant **elements** constituted of **narrow stripe portions** 3a and 3b of a uniaxially anisotropic permalloy film 3 provided on a substrate 2...

7/3,K/4 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

015832972 \*\*Image available\*\*  
WPI Acc No: 2003-895176/200382  
XRPX Acc No: N03-714218

**Slider bar lapping method in disk drive actuation system, involves actuating shear based transducer in each slider, during lapping on disk, based on sensed stripe height of magnetoresistive element**

Patent Assignee: SEAGATE TECHNOLOGY LLC (SEAG-N)

Inventor: ANGELO J E; BOUTAGHOU Z

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6568992	B1	20030527	US 2000197226	P	20000414	200382 B
			US 2001828489	A	20010406	

Priority Applications (No Type Date): US 2000197226 P 20000414; US  
2001828489 A 20010406

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6568992	B1	10	B24B-049/00	Provisional application US 2000197226

Abstract (Basic):

... continues to be lapped until it reaches the desired stripe height. By monitoring the sensed **stripe height**, the transducer is **controlled** to ensure the **MR element** is precisely lapped to the desired stripe height...

7/3,K/5 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

014658440 \*\*Image available\*\*  
WPI Acc No: 2002-479144/200251  
XRPX Acc No: N02-378405

**Magnetoresistive head producing method for disc drive, involves dynamically covering magnetoresistive element to prevent removal of**

**material from element based on its detected electrical resistance**

Patent Assignee: SEAGATE TECHNOLOGY LLC (SEAG-N)  
Inventor: HAO S; HOEHN J W; LUSE T A; PETERSON J R; REJDA E F; STOVER L E  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020057537	A1	20020516	US 2000225348	A	20000815	200251 B
			US 2000241217	A	20001013	
			US 2001930741	A	20010815	

Priority Applications (No Type Date): US 2001930741 A 20010815; US  
2000225348 P 20000815; US 2000241217 P 20001013

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020057537	A1		20	G11B-005/33	Provisional application US 2000225348
					Provisional application US 2000241217

Abstract (Basic):

... For **controlling stripe height of MR element in MR**  
**head of disk drive...**

**7/3,K/6 (Item 3 from file: 350)**

DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

014539799 \*\*Image available\*\*  
WPI Acc No: 2002-360502/200239  
XRPX Acc No: N02-281603

**Predictive failure analysis (PFA) method for disk drives, involves  
comparing measurement of resistance for read sensor, e.g.  
magnetoresistive head, to baseline and flagging file for corrective  
action when problem is detected**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )  
Inventor: GILLIS D R; SCHOUTERDEN K V; WOLTER R F  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6359433	B1	20020319	US 99460651	A	19991214	200239 B

Priority Applications (No Type Date): US 99460651 A 19991214

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6359433	B1		18	G01R-033/12	

Abstract (Basic):

... 1) A method for qualitatively and quantitatively measuring a  
**change in stripe height of a MR head in a disk drive...**

**7/3,K/7 (Item 4 from file: 350)**

DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

014374349 \*\*Image available\*\*  
WPI Acc No: 2002-195052/200225  
Related WPI Acc No: 2003-755637  
XRPX Acc No: N02-148158

**Finishing disc drive slider comprises etching trenches between unfinished  
sliders, and applying multiple pressures to back surface of one slider**

while its front surface contacts lapping surface

Patent Assignee: SEAGATE TECHNOLOGY LLC (SEAG-N); BOUTAGHOU Z (BOUT-I)

Inventor: BOUTAGHOU Z

Number of Countries: 094 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020009949	A1	20020124	US 2000218262	P	20000713	200225 B
			US 2001901321	A	20010709	
WO 200207154	A2	20020124	WO 2001US21561	A	20010709	200225
AU 200173273	A	20020130	AU 200173273	A	20010709	200236
GB 2380049	A	20030326	WO 2001US21561	A	20010709	200323
			GB 20031026	A	20030116	
US 6551173	B2	20030422	US 2000218262	P	20000713	200330
			US 2001901321	A	20010709	
GB 2380049	B	20040107	WO 2001US21561	A	20010709	200404
			GB 20031026	A	20030116	
KR 2003078057	A	20031004	KR 2003700501	A	20030113	200411
JP 2004504685	W	20040212	WO 2001US21561	A	20010709	200413
			JP 2002512974	A	20010709	
AU 2001273273	A8	20050915	AU 2001273273	A	20010709	200569

Priority Applications (No Type Date): US 2000218262 P 20000713; US 2001901321 A 20010709

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020009949	A1	12	B24B-049/00		Provisional application US 2000218262

WO 200207154 A2 E G11B-005/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200173273	A		G11B-005/00	Based on patent WO 200207154
GB 2380049	A		G11B-005/187	Based on patent WO 200207154
US 6551173	B2		B24B-001/00	Provisional application US 2000218262
GB 2380049	B		G11B-005/187	Based on patent WO 200207154
KR 2003078057	A		G11B-005/127	
JP 2004504685	W	31	G11B-005/60	Based on patent WO 200207154
AU 2001273273	A8		G11B-005/10	Based on patent WO 200207154

Abstract (Basic):

Technology Focus:

... control the approach of the front surface to the lapping surface. The applied pressures are **controlled** to adjust the **stripe height** of a **magnetoresistive transducer** or the throat height of an inductive transducer of each slider. The sliders are lapped...

7/3,K/8 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 Thomson Derwent. All rts. reserv.

014291946 \*\*Image available\*\*

WPI Acc No: 2002-112648/200215

XRPX Acc No: N02-083794

**Electrical lapping guide** for controlling stripe height of magnetoresistive read heads , has resistive elements with upper edges away from lapping plane and relative to upper edge of giant magnetoresistive read sensor

Patent Assignee: READ RITE CORP (READ-N)

Inventor: CRUE B W; HARNISCHFEGGER M T; MACCHIONI C V; PLEWES S J; RUDY S C;  
SHEN Y

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6193584	B1	20010227	US 99321486	A	19990527	200215 B
JP 2001014617	A	20010119	JP 2000159237	A	20000529	200215

Priority Applications (No Type Date): US 99321486 A 19990527

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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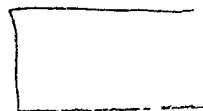
US 6193584	B1	26	B24B-001/00		
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JP 2001014617	A	23	G11B-005/39		
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**Electrical lapping guide for controlling stripe height of  
magnetoresistive read heads , has resistive elements with upper edges  
away from lapping plane and relative to upper edge...**

Abstract (Basic):

... For controlling stripe height of magnetoresistive ( MR )  
read head such as anisotropic MR read heads , giant MR read  
heads , spin valve read heads used in magnetic disk drives of computer



11/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

07421462 \*\*Image available\*\*  
NITRIDE SEMICONDUCTOR LASER ELEMENT

PUB. NO.: 2002-289972 [JP 2002289972 A]  
PUBLISHED: October 04, 2002 (20021004)  
INVENTOR(s): IWASA SHIGETO  
YAMADA TAKAO  
NAKAMURA SHUJI  
APPLICANT(s): NICHIA CHEM IND LTD  
APPL. NO.: 2002-006460 [JP 20026460]  
Division of 08-053429 [JP 9653429]  
FILED: March 11, 1996 (19960311)

INVENTOR(s): IWASA SHIGETO  
YAMADA TAKAO  
NAKAMURA SHUJI

ABSTRACT

... manufacturing a nitride semiconductor laser element, capable of easily manufacturing an active region at a **narrow stripe width** to thereby aim at a continuous oscillation at the ambient temperature by lowering the threshold...

11/3,K/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

06515476 \*\*Image available\*\*  
NITRIDE SEMICONDUCTOR LASER ELEMENT

PUB. NO.: 2000-101193 [JP 2000101193 A]  
PUBLISHED: April 07, 2000 (20000407)  
INVENTOR(s): KAWANO YOSHIHIRO  
NAKAMURA SHUJI  
APPLICANT(s): NICHIA CHEM IND LTD  
APPL. NO.: 10-267759 [JP 98267759]  
FILED: September 22, 1998 (19980922)

INVENTOR(s): KAWANO YOSHIHIRO  
NAKAMURA SHUJI

ABSTRACT

... semiconductor laser element, with improved far field pattern and single vertical horizontal mode.

SOLUTION: A **stripe width** which is at least in a ridge shape is provided directly below and in parallel...

11/3,K/3 (Item 3 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

06062531 \*\*Image available\*\*  
NITRIDE SEMICONDUCTOR LASER ELEMENT AND MANUFACTURE THEREOF



PUB. NO.: 11-004039 [JP 11004039 A]  
PUBLISHED: January 06, 1999 (19990106)  
INVENTOR(s): YAMADA TAKAO  
NAKAMURA SHUJI  
APPLICANT(s): NICHIA CHEM IND LTD  
APPL. NO.: 09-153814 [JP 97153814]  
FILED: June 11, 1997 (19970611)

INVENTOR(s): YAMADA TAKAO  
NAKAMURA SHUJI

ABSTRACT

...side clad layer 19 are partly etched into a ridge structure 4  $\mu\text{m}$  in  
**stripe width**. In succession, a P electrode 21 of Ni and Au is formed on  
all the...

11/3,K/4 (Item 4 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

05959481 \*\*Image available\*\*  
NITRIDE SEMICONDUCTOR LASER ELEMENT

PUB. NO.: 10-242581 [JP 10242581 A]  
PUBLISHED: September 11, 1998 (19980911)  
INVENTOR(s): SANO MASAHIKO  
NAKAMURA SHUJI  
APPLICANT(s): NICHIA CHEM IND LTD [424878] (A Japanese Company or  
Corporation), JP (Japan)  
APPL. NO.: 09-044176 [JP 9744176]  
FILED: February 27, 1997 (19970227)

INVENTOR(s): SANO MASAHIKO  
NAKAMURA SHUJI

ABSTRACT

...line (b) of the width of the active layer 3, the crystal of the ridge  
**stripe portion** 4' is made hardly destroyable, thereby improving the  
life time of the element.

11/3,K/5 (Item 5 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

05791908 \*\*Image available\*\*  
NITRIDE SEMICONDUCTOR LASER ELEMENT

PUB. NO.: 10-075008 [JP 10075008 A]  
PUBLISHED: March 17, 1998 (19980317)  
INVENTOR(s): SENOO MASAYUKI  
NAKAMURA SHUJI  
APPLICANT(s): NICHIA CHEM IND LTD [424878] (A Japanese Company or  
Corporation), JP (Japan)  
APPL. NO.: 08-229161 [JP 96229161]  
FILED: August 30, 1996 (19960830)

INVENTOR(s): SENOO MASAYUKI

**NAKAMURA SHUJI**

**ABSTRACT**

... 2. Meanwhile, over the entire flat surface of a p-type contact layer 8 of **stripe width**, a p-electrode 31 comprising Ni and Au is formed. By forming the n-electrode...

11/3,K/6 (Item 6 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

05318914 \*\*Image available\*\*  
NITRIDE SEMICONDUCTOR LASER ELEMENT

PUB. NO.: 08-274414 [JP 8274414 A]  
PUBLISHED: October 18, 1996 (19961018)  
INVENTOR(s): YAMADA TAKAO  
SENOO MASAYUKI  
**NAKAMURA SHUJI**  
APPLICANT(s): NICHIA CHEM IND LTD [424878] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 07-317846 [JP 95317846]  
FILED: December 06, 1995 (19951206)  
  
INVENTOR(s): YAMADA TAKAO  
SENOO MASAYUKI  
**NAKAMURA SHUJI**

**ABSTRACT**

... type contact layer 7. The positive electrode 12 having almost the same width as a **stripe width** of the p-type contact layer 7 etched to a stripe is formed in a...

11/3,K/7 (Item 7 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

05258194 \*\*Image available\*\*  
NITRIDE SEMICONDUCTOR LASER ELEMENT

PUB. NO.: 08-213694 [JP 8213694 A]  
PUBLISHED: August 20, 1996 (19960820)  
INVENTOR(s): SENOO MASAYUKI  
YAMADA TAKAO  
SUGIMOTO YASUNOBU  
**NAKAMURA SHUJI**  
APPLICANT(s): NICHIA CHEM IND LTD [424878] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 07-020420 [JP 9520420]  
FILED: February 08, 1995 (19950208)  
  
INVENTOR(s): SENOO MASAYUKI  
YAMADA TAKAO  
SUGIMOTO YASUNOBU  
**NAKAMURA SHUJI**

**ABSTRACT**

...the outside of the active layer of a nitride semiconductor laser element

by making the **stripe width** of an N-type nitride semiconductor layer narrower than the width of a substrate...

... layers and loss is reduced, and oscillation is possible at all times. When the favorable **stripe width** (b) of the N-type nitride semiconductor layers is set in 1-50.mu.m...

**11/3,K/8 (Item 8 from file: 347)**  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

04909739 \*\*Image available\*\*  
SEMICONDUCTOR LASER ELEMENT AND MANUFACTURE THEREOF

PUB. NO.: 07-202339 [JP 7202339 A]  
PUBLISHED: August 04, 1995 (19950804)  
INVENTOR(s): **OSAWA YASUHIRO**  
APPLICANT(s): RICOH CO LTD [000674] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 05-337404 [JP 93337404]  
FILED: December 28, 1993 (19931228)

INVENTOR(s): **OSAWA YASUHIRO**

#### ABSTRACT

... clad layers 104, 105 and a cap layer 106 constitute the striped mesas whereby the **stripe width** of the fourth clad layer 104 is narrower than those of the fourth clad layer...

**11/3,K/9 (Item 9 from file: 347)**  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

04884226 \*\*Image available\*\*  
GALLIUM NITRIDE COMPOUND SEMICONDUCTOR LASER ELEMENT

PUB. NO.: 07-176826 [JP 7176826 A]  
PUBLISHED: July 14, 1995 (19950714)  
INVENTOR(s): YAMADA TAKAO  
SENOO MASAYUKI  
**NAKAMURA SHUJI**  
APPLICANT(s): NICHIA CHEM IND LTD [424878] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 05-318275 [JP 93318275]  
FILED: December 17, 1993 (19931217)

INVENTOR(s): YAMADA TAKAO  
SENOO MASAYUKI  
**NAKAMURA SHUJI**

#### ABSTRACT

...etching is performed until the layer 3 is exposed to form a waveguide of a **stripe width** formed in a width of 50.mu.m. After the etching, the mask is peeled...

**11/3,K/10 (Item 10 from file: 347)**  
DIALOG(R)File 347:JAPIO

(c) 2006 JPO & JAPIO. All rts. reserv.

03695583     \*\*Image available\*\*  
ASSEMBLING METHOD FOR IMAGE FORMING DEVICE

PUB. NO.:        04-060683    [JP 4060683    A]  
PUBLISHED:      February 26, 1992 (19920226)  
INVENTOR(s):    YAGI MICHIO  
                  NAGAI MASARU  
                  TSUTSUMI TAKASHI  
                  SUGAYA TOYOAKI  
                  **HANEDA SATORU**

APPLICANT(s):   KONICA CORP [000127] (A Japanese Company or Corporation), JP  
                  (Japan)

APPL. NO.:       02-172135    [JP 90172135]

FILED:           June 29, 1990 (19900629)

JOURNAL:        Section: P, Section No. 1368, Vol. 16, No. 256, Pg. 4, June  
                  10, 1992 (19920610)

INVENTOR(s):    YAGI MICHIO  
                  NAGAI MASARU  
                  TSUTSUMI TAKASHI  
                  SUGAYA TOYOAKI  
                  **HANEDA SATORU**

#### ABSTRACT

... deviation in the breadthwise direction of a belt photosensitive body by positioning rolls to projecting **stripe zones** of the belt photosensitive body and circulating the belt photosensitive belt by preparatory rotation of rolls to completely move the belt photosensitive body to projecting **stripe zones** after assembling the belt photosensitive body in a device main body...

...CONSTITUTION: Projecting **stripe zones** 301 and 302 projecting to the inside are formed on the peripheral edge of a belt photosensitive body 3, and rolls 1 and 2 are positioned to projecting **stripe zones** 301 and 302. After the belt photosensitive body 3 is assembled in the device main ...

... circulated by preparatory rotation of rolls 1 and 2 and is completely moved to projecting **stripe zones** 301 and 302. Since the belt photosensitive body 3 is already completely moved to one..

13/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

06602015 \*\*Image available\*\*  
THIN-FILM MAGNETIC HEAD

PUB. NO.: 2000-187812 [JP 2000187812 A]  
PUBLISHED: July 04, 2000 (20000704)  
INVENTOR(s): NAKAMURA MASAHIRO  
SASAKURI KOZO  
HIGUCHI TAKAHIRO  
NAGAI HIDEYASU  
HASHIMOTO MASAYA  
TAKAGISHI MASAYUKI  
APPLICANT(s): READ RITE SMI KK  
APPL. NO.: 10-359337 [JP 98359337]  
FILED: December 17, 1998 (19981217)

#### ABSTRACT

...the thermal stability and EDS durability of a spin valve element.

SOLUTION: A thin-film **magnetic head** is equipped with a bottom type spin valve element 9 constituted by **stacking** an antiferromagnetic body layer 91, a fixed-side magnetic body layer 92, a nonmagnetic conductor layer 93 and a free-side magnetic body **layer** 94 on a **substrate** in this order, and a couple of electrode layers which are connected to both ends of the element 9. The thin-film **magnetic head** has its internal end surface tapered in its **stripe height** direction so that the **stripe height** SHAFM of the element 9 gradually increases from the upper end side to the lower...

13/3,K/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2006 JPO & JAPIO. All rts. reserv.

06596425 \*\*Image available\*\*  
MAGNETORESISTIVE MAGNETIC HEAD

PUB. NO.: 2000-182222 [JP 2000182222 A]  
PUBLISHED: June 30, 2000 (20000630)  
INVENTOR(s): NAKAMURA MASAHIRO  
SASAKURI KOZO  
HIGUCHI TAKAHIRO  
NAGAI HIDEYASU  
HASHIMOTO MASAYA  
TAKAGISHI MASAYUKI  
APPLICANT(s): READ RITE SMI KK  
APPL. NO.: 10-359336 [JP 98359336]  
FILED: December 17, 1998 (19981217)

#### ABSTRACT

PROBLEM TO BE SOLVED: To improve the thermal stability and ESD durability of an **MR head**.

SOLUTION: In this **magnetoresistive magnetic head** provided with a thin-film **magneto**-resistance **element** 9, a couple of electrode layers which are electrically connected to the right and left ends of the element

9, and shield layers 7 and 12 which are **stacked** on the top and reverse sides of the thin-film **magneto** - resistance **element** 9 and electrode layer 10 across gap layers 9 and 11, a thermal buffer film...

... materials of the gap layers 8 and 11 is formed adjacently inside the thin-film **magneto** -resistance **element** 9 in the direction of **stripe height** SH.

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**13/3,K/3** (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

017443212 \*\*Image available\*\*  
WPI Acc No: 2005-766891/200578  
XRAM Acc No: C05-234583  
XRPX Acc No: N05-633104

**Current perpendicular to plane magnetoresistive sensor for perpendicular recording systems, comprises pinning structure between backward extending portions of pinned layer structures**

Patent Assignee: HITACHI GLOBAL STORAGE TECHNOLOGIES NETH (HITA-N)

Inventor: GILL H S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20050243474	A1	20051103	US 2004837192	A	20040430	200578 B

Priority Applications (No Type Date): US 2004837192 A 20040430

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20050243474	A1		14	G11B-005/33	

Abstract (Basic):

... structures and the free layer forming a sensor stack having a back edge defining a **stripe height** measured perpendicular to the ABS, each pinned layer structure having a backward extending portion extending beyond the **stripe height** of sensor **stack** ; and pinning structure between backward extending portions of the pinned layer structures...

**13/3,K/4** (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2006 Thomson Derwent. All rts. reserv.

015394445 \*\*Image available\*\*  
WPI Acc No: 2003-456586/200343  
XRPX Acc No: N03-363102

**Magnetoresistive reader formation method involves defining stripe height back edge of magnetoresistive sensor prior to defining reader width of sensor**

Patent Assignee: SEAGATE TECHNOLOGY LLC (SEAG-N)

Inventor: ANDERSON P E; BURBANK D P; DIMITROV D V; JIN I; LARSON R P;  
NAUGHTON K P

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030046807	A1	20030313	US 2001322311	P	20010912	200343 B

US 200250236 A 20020115

Priority Applications (No Type Date): US 2001322311 P 20010912; US  
200250236 A 20020115

Patent Details:

Patent No	Kind	Lang	Pg	Main IPC	Filing Notes
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US 20030046807	A1		17	G11B-005/127	Provisional application US 2001322311
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Abstract (Basic):

... of sensor. Stripe height back edge and reader width of sensor  
are defined by depositing **multiple magnetoresistive sensor**  
**layers** , selectively patterning photoresist layer that leaves a region  
of sensor layer exposed and removing the...

File 348:EUROPEAN PATENTS 1978-2006/Feb W03

(c) 2006 European Patent Office

File 349:PCT FULLTEXT 1979-2006/UB=20060216,UT=20060209

(c) 2006 WIPO/Univentio

Set	Items	Description
S1	10031	(MAGNET? OR MR OR GMR OR GIANT()MAGNETORESISTANCE) (3N) (HEAD?? OR ELEMENT?? OR SENSOR?? OR SENSING OR SENSITIVE OR ACTIVE OR TRANSDUCER??)
S2	1469	STRIPE??() (WIDTH?? OR HEIGHT OR AREA?? OR SIZE?? OR VOLUME-?? OR DEPTH OR PORTION?? OR REGION?? OR ZONE??)
S3	156	(CONTROL? OR CHANGE?? OR CHANGING OR WIDEN??? OR NARROW??? OR MODIFY??? OR MODIFY? OR REDUCE?? OR REDUCING OR SHRINK???) - (3N) S2
S4	263948	STACK??? OR (PLURAL? OR MANY OR MULTIPLE?? OR MANY OR SEVERAL OR MULTI OR NUMEROUS OR SUBSTRATE) (3N) LAYER??
S5	1451	AU=(HANEDA, S? OR HANEDA S? OR OSAWA, Y? OR OSAWA Y? OR NAKAMURA, S? OR NAKAMURA S?)
S6	2267	(GATE()ELECTRODE??) (3N) VOLT????
S7	17	S1 (3N) S2
S8	0	S7 (3N) S4
S9	0	S7 (3N) S6
S10	0	S7 AND S5
S11	7	S2 AND S5
S12	17	S7 NOT S11
S13	16	S12 AND IC=G11B?
S14	0	S11 AND IC=G11B?
S15	2	S1 (3N) S3
S16	0	S15 NOT (S7 OR S11)
S17	0	(S2 OR S3) (3N) S6



11/3,K/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2006 European Patent Office. All rts. reserv.

01264764

Semiconductor device, semiconductor substrate, and manufacture method  
Halbleitervorrichtung, Halbleitersubstrat und Herstellungsverfahren  
Dispositif semi-conducteur, Substrat semi-conducteur et procede de  
fabrication

PATENT ASSIGNEE:

Matsushita Electronics Corporation, (456138), 1-1, Saiwai-cho,  
Takatsuki-shi, Osaka 569-1193, (JP), (Applicant designated States: all)

INVENTOR:

Nakamura, Shinji , 1-3-507-403, Nasahara, Takatsuki-shi, Osaka 569-1041,  
(JP)

Ishida, Masahiro, 24-6, Ikaga-nishimachi, Hirakata-shi, Osaka 573-0066,  
(JP)

Orita, Kenji, 1-44-9, Tsunoe-cho, Takatsuki-shi, Osaka 569-0822, (JP)

Imafuji, Osamu, 1-10-5-507, Kamihamuro-cho, Takatsuki-shi, Osaka 569-1044  
, (JP)

Yuri, Masaaki, 6-26-1201, Funaki-cho, Ibaraki-shi, Osaka 567-0828, (JP)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhauser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1091422 A2 010411 (Basic)

APPLICATION (CC, No, Date): EP 121878 001006;

PRIORITY (CC, No, Date): JP 99285582 991006

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS (V7): H01L-033/00; H01L-021/20

ABSTRACT WORD COUNT: 52

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200115	2146
SPEC A	(English)	200115	9769
Total word count - document A			11915
Total word count - document B			0
Total word count - documents A + B			11915

INVENTOR:

Nakamura, Shinji ...

...SPECIFICATION the depressions or projections are placed. As a result of  
such arrangement, defects in the **stripe region** can be reduced,  
thereby improving the characteristics of the semiconductor laser  
elements.

EMBODIMENT 5

Referring...

11/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2006 European Patent Office. All rts. reserv.

01206566

**NITRIDE SEMICONDUCTOR LASER ELEMENT**

**NITRIDHALBLEITERLASERELEMENT**

**ELEMENT DE LASER SEMICONDUCTEUR AU NITRURE**

**PATENT ASSIGNEE:**

Nichia Corporation, (2966640), 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima 774-8601, (JP), (Applicant designated States: all)

**INVENTOR:**

KOZAKI, Tokuya Nichia Corporation, 491-100, Oka, Kaminakacho, Anan-shi  
Tokushima 774-8601, (JP)

SANO, Masahiko Nichia Corporation, 491-100, Oka, Kaminakacho, Anan-shi  
Tokushima 774-8601, (JP)

**NAKAMURA, Shuji Nichia Corporation**, 491-100, Oka, Kaminakacho, Anan-shi  
Tokushima 774-8601, (JP)

NAGAHAMA, Shinichi Nichia Corporation, 491-100, Oka, Kaminakacho,  
Anan-shi Tokushima 774-8601, (JP)

**LEGAL REPRESENTATIVE:**

VOSSIUS & PARTNER (100314), Siebertstrasse 4, 81675 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1168539 A1 020102 (Basic)  
WO 200052796 000908

APPLICATION (CC, No, Date): EP 2000906695 000303; WO 2000JP1308 000303

PRIORITY (CC, No, Date): JP 9957211 990304; JP 99157646 990604; JP 99163499  
990610; JP 99163500 990610

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS (V7): H01S-005/22

ABSTRACT WORD COUNT: 193

**NOTE:**

Figure number on first page: 11

LANGUAGE (Publication,Procedural,Application): English; English; Japanese  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200201	1160
SPEC A	(English)	200201	26724
Total word count - document A			27884
Total word count - document B			0
Total word count - documents A + B			27884

**INVENTOR:**

... JP)

**NAKAMURA, Shuji Nichia Corporation** ...

...ABSTRACT stripe structure formed by etching from the side of the p-side contact layer. The **stripe width** provided by etching is within the stripe range of 1 to 3 ( $\mu$ )m and...

...SPECIFICATION from the p-side contact layer to above the active layer, characterized in that the **stripe width** providing by etching is within the narrow stripe range of 1 to 3 ( $\mu$ )m...

...0.1 ( $\mu$ )m.

That is, according to the present invention, the waveguide having such **stripe width** and depth enables the basic mode emission having a stable lateral mode and there is...

...the device having less leak current and a high reliability can be obtained.

Preferably, the **stripe width** is 1.2 to 2 ( $\mu$ )m. This nitride semiconductor device has a refractive index...In the ridge waveguide

structure, the effective refractive index changes depending on the etching depth, **stripe height** and the like. Such a structure change effects on the device properties extremely. Then, the...

...the aspect ratio is about 2.0 and moreover, about 1.5.

And since the **stripe width** of the projection part is within the range of not less than 1 ( $\mu$ m)...the dispersion of devices is small and the yield of manufacture can be increased.

The **stripe width** of the projection part is preferably not less than 1 ( $\mu$ m) and not more...an example of the present invention.

Fig. 7 is a diagram showing the relation between **stripe width** and single transverse mode oscillation in the present invention.

Fig. 8 is a diagram showing...oxide is preferably used as a material that can be easily dissolved in hydrofluoric acid. **Stripe width** (W) of the first protective film is controlled within a range from 3 ( $\mu$ m) to 1 ( $\mu$ m). **Stripe width** of the first protective film 61 corresponds substantially to the **stripe width** in the waveguide region.

Figs. 3A and 3B show specific processes of forming the first...to restrict the formation of the p electrode only on the contact layer of small **stripe width** and, instead, the p electrode may be formed over a large area. In addition, an...the present invention, satisfactory control of the transverse mode is made possible by setting the **stripe width** of the ridge waveguide, or the **stripe width** of the protruding portion of the p-side optical guide layer in a range from...the present invention, satisfactory control of the transverse mode is made possible by setting the **stripe width** of the ridge waveguide, or the **stripe width** of the protruding portion of the p-side optical guide layer, in a range from...protective film 61 and a third protective film 63 made of photo resist having a **stripe width** of 2 ( $\mu$ m) and a thickness of 1 ( $\mu$ m) was formed.

Next, as...

...by the treatment with an etchant to form a first protective film 61 having a **stripe width** of 2 ( $\mu$ m) on the p-side contact layer 13, as shown in Fig 13. The p-electrode 20 had a **stripe width** of 100 ( $\mu$ m) and was formed in a manner to extend over the second...this drawing, the layered structure which is cut in the perpendicular direction to the projected **stripe region** is shown. Example 7 will be described with reference to Fig. 17.

A sapphire substrate...protective film 161 and a third protective film 163 made of photo resist having a **stripe width** of 2 ( $\mu$ m) and a thickness of 1 ( $\mu$ m) was formed. The insulting...

...by the treatment with an etchant to form a first protective film 161 having a **stripe width** of 2 ( $\mu$ m) on the p-side contact layer 112, as shown in Fig...

...film 161 on said p-side contact layer 112. The p-electrode 120 had a **stripe width** of 100 ( $\mu$ m) and was formed in a manner to extend over the second...laser device was fabricated in the same manner as in Example 7, except that the **stripe width** of the p-side optical waveguide layer was 3 ( $\mu$ m). For the resulting laser...devices in which kinks occurred was increased as compared with in Example 7. Thus, the **stripe width** is more preferably in the range of 2 ( $\mu$ m) (+-) 0.5 ( $\mu$ m) (between...this drawing, the layered structure which is cut in the perpendicular direction to the projected **stripe region** is shown. Example 13 will be described with reference to Fig. 18.

A sapphire substrate...protective film 161 and a third protective film 163 made of photo resist having a **stripe width** of 2 ( $\mu$ m) and a thickness of 1 ( $\mu$ m) was formed. The insulting...

...by the treatment with an etchant to form a first protective film 161 having a **stripe width** of 2 ( $\mu$ m) on the p-side contact layer 112, as shown in Fig...film 161 on said p-side contact layer 112. The p-electrode 120 had a **stripe width** of 100 ( $\mu$ m) and was formed in a manner to extend over the second...laser device was fabricated in the same manner as in Example 13, except that the **stripe width** of the projected portion of the p-side optical waveguide layer, that is, the width...

...the ratio of the defective devices in which kinks occurred tended to increase. Therefore, the **stripe width** is more preferably within the range of 2 ( $\mu$ m) (+-) 0.5 ( $\mu$ m) (between...Table 4 were laminated sequentially on the substrate. Next, The stripe ridge waveguide having a **stripe width** of 1.8 ( $\mu$ m) was formed by etching from the p-side contact layer...

11/3,K/3 (Item 3 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01199269

**NITRIDE SEMICONDUCTOR DEVICE AND ITS MANUFACTURING METHOD**

**NITRIDHALBLEITER UND SEINE HERSTELLUNGSMETHODE**

**SEMI-CONDUCTEUR AU NITRURE ET PROCEDE DE FABRICATION**

PATENT ASSIGNEE:

Nichia Corporation, (2966640), 491-100, Oka, Kaminaka-cho, Anan-shi,  
Tokushima 774-8601, (JP), (Applicant designated States: all)

INVENTOR:

NAGAHAMA, Shinichi Nichia Corporation, 491-100, Oka, Kaminakacho,  
Anan-shi Tokushima 774-8601, (JP)

**NAKAMURA, Shuji Nichia Corporation**, 491-100, Oka, Kaminakacho, Anan-shi  
Tokushima 774-8601, (JP)

LEGAL REPRESENTATIVE:

OK pat AG (101251), Chamerstrasse 50, 6300 Zug, (CH)

PATENT (CC, No, Kind, Date): EP 1184913 A1 020306 (Basic)  
WO 200048254 000817

APPLICATION (CC, No, Date): EP 2000902126 000208; WO 2000JP660 000208

PRIORITY (CC, No, Date): JP 9930990 990209; JP 99331797 991122

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS (V7): H01L-033/00; H01L-021/205; H01S-005/323

ABSTRACT WORD COUNT: 79

NOTE:

Figure number on first page: 5

LANGUAGE (Publication,Procedural,Application): English; English; Japanese

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200210	296
SPEC A	(English)	200210	5904
Total word count - document A			6200
Total word count - document B			0
Total word count - documents A + B			6200

INVENTOR:

... JP)

**NAKAMURA, Shuji Nichia Corporation** ...

...SPECIFICATION mask having stripes was formed. Then, the SiO<sub>2</sub>) film which was patterned to have a **stripe width** (the upper part of the convex portion) of 5 (μ)m and a stripe distance...protective film 61 and a third protective film 63 made of photo resist having a **stripe width** of 1.8 (μ)m and a thickness of 1 (μ)m was formed.

Next...

...by the treatment with an etchant to form a first protective film 61 having a **stripe width** of 1.8 (μ)m on the p-side contact layer 10, as shown in...

...again etched using SiCl<sub>4</sub>) gas with the RIE to form a ridge stripe having a **stripe width** of 1.8 (μ)m.

After formation of the ridge stripe, the wafer was transferred...

...protective film 61 on said p-side contact layer. The p-electrode 20 had a **stripe width** of 100 (μ)m and was formed in a manner to extend over the

11/3,K/4 (Item 4 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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01026054

**NITRIDE SEMICONDUCTOR DEVICE**

**HALBLEITERVORRICHTUNG AUS EINER NITRIDVERBINDUNG**

**DISPOSITIF A SEMI-CONDUCTEUR EN NITRURE**

PATENT ASSIGNEE:

NICHIA CHEMICAL INDUSTRIES, LTD., (1569971), 491-100, Oka, Kaminakacho, Anan-shi, Tokushima 774-8601, (JP), (Applicant designated States: all)

INVENTOR:

**NAKAMURA, Shuji, Nichia Chemical Industries, Ltd.**, 491-100, Oka,

Kaminakacho, Anan-shi, Tokushima 774-8601, (JP)

**MUKAI, Takashi, Nichia Chemical Industries, Ltd.**, 491-100, Oka,

Kaminakacho, Anan-shi, Tokushima 774-8601, (JP)

**TANIZAWA, Koji, Nichia Chemical Industries, Ltd.**, 491-100, Oka,

Kaminakacho, Anan-shi, Tokushima 774-8601, (JP)

**MITANI, Tomotsugu, Nichia Chemical Industries, Ltd.**, 491-100, Oka,

Kaminakacho, Anan-shi, Tokushima 774-8601, (JP)

**MARUI, Hiromitsu, Nichia Chemical Industries, Ltd.**, 491-100, Oka,

Kaminakacho, Anan-shi, Tokushima 774-8601, (JP)

LEGAL REPRESENTATIVE:

OK pat AG (101251), Chamerstrasse 50, 6300 Zug, (CH)

PATENT (CC, No, Kind, Date): EP 1014455 A1 000628 (Basic)

WO 9905728 990204

APPLICATION (CC, No, Date): EP 98933944 980727; WO 98JP3336 980727

PRIORITY (CC, No, Date): JP 97199471 970725; JP 97235524 970901; JP

97286304 971020; JP 97304328 971106; JP 97317421 971118; JP 97348972

971218; JP 97348973 971218; JP 98176623 980608; JP 98176634 980608; JP

98199829 980629

DESIGNATED STATES: DE; ES; FR; GB; IT; NL; SE

INTERNATIONAL PATENT CLASS (V7): H01L-033/00

ABSTRACT WORD COUNT: 89

NOTE:

Figure number on first page: 01

LANGUAGE (Publication,Procedural,Application): English; English; Japanese

FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

CLAIMS A	(English)	200026	630
SPEC A	(English)	200026	11708
Total word count - document A			12338
Total word count - document B			0
Total word count - documents A + B			12338

INVENTOR:

**NAKAMURA, Shuji, Nichia Chemical Industries, Ltd ...**

...SPECIFICATION are the uppermost layers are etched with RIE apparatus into a ridge geometry with a **stripe width** 4 (mu)m.

After the ridge geometry is formed, as shown in Fig. 2, the...are the uppermost layers are etched with RIE apparatus into a ridge geometry with a **stripe width** 4 (mu)m. Particularly, when the nitride semiconductor layers containing Al which are above the...

11/3,K/5 (Item 5 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01002261

**METHOD OF GROWING NITRIDE SEMICONDUCTORS, NITRIDE SEMICONDUCTOR SUBSTRATE AND NITRIDE SEMICONDUCTOR DEVICE**  
**WACHSTUMSMETHODE FUR EINEN NITRID-HALBLEITER, NITRID HALBLEITERSUBSTRAT UND VORRICHTUNG**

**PROCEDE ASSURANT LA CROISSANCE DE SEMI-CONDUCTEURS DE NITRURE, SUBSTRAT SEMI-CONDUCTEUR DE NITRURE ET DISPOSITIF SEMI-CONDUCTEUR AU NITRURE.**

PATENT ASSIGNEE:

NICHIA CHEMICAL INDUSTRIES, LTD., (1569971), 491-100, Oka, Kaminakacho, Anan-shi, Tokushima 774-8601, (JP), (Applicant designated States: all)

INVENTOR:

KIYOKU, Hiroyuki-Nichia Chemical Industries, Ltd., 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima-ken 774-0044, (JP)

**NAKAMURA, Shuji-Nichia Chemical Industries, Ltd.**, 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima-ken 774-0044, (JP)

KOZAKI, Tokuya-Nichia Chemical Industries, Ltd., 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima-ken 774-0044, (JP)

IWASA, Naruhito-Nichia Chemical Industries, Ltd., 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima-ken 774-0044, (JP)

CHOCHO, Kazuyuki-Nichia Chemical Industries, Ltd., 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima-ken 774-0044, (JP)

LEGAL REPRESENTATIVE:

Hertz, Oliver, Dr. (79051), v. Bezold & Partner, Patentanwalte  
 Akademiestrasse 7, 80799 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 942459 A1 990915 (Basic)  
 WO 9847170 981022

APPLICATION (CC, No, Date): EP 98912742 980409; WO 98JP1640 980409

PRIORITY (CC, No, Date): JP 9793315 970411; JP 97174494 970630; JP 97181071 970707; JP 97201477 970728; JP 97277448 971009; JP 97290098 971022; JP 97324997 971126

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS (V7): H01L-021/205; H01L-033/00; C23C-016/34

ABSTRACT WORD COUNT: 137

NOTE:

Figure number on first page: 1C

LANGUAGE (Publication,Procedural,Application): English; English; Japanese  
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9937	5636
SPEC A	(English)	9937	28314
Total word count - document A			33950
Total word count - document B			0
Total word count - documents A + B			33950

INVENTOR:

... JP)

NAKAMURA, Shuji-Nichia Chemical Industries, Ltd ...

...SPECIFICATION 1-( $\mu$ m) thick selective growth masks 13 made of many SiO<sub>2</sub>) stripes having a **stripe width** of 10 ( $\mu$ m) and a stripe interval (width of each window) of 6 ( $\mu$ m)...described with reference to FIGS. 6A to 6C.

Second selective growth masks 113 having a **stripe width** of 10 ( $\mu$ m) and a stripe interval of 6 ( $\mu$ m) were grown on...

...layer structure. First selective growth masks 13 made up of many SiO<sub>2</sub>) stripes having a **stripe width** of 10 ( $\mu$ m) and a stripe interval of 8 ( $\mu$ m) were grown on...

...lapping. Second selective growth masks 113 made up of many Si<sub>3</sub>)N<sub>4</sub>) stripes having a **stripe width** of 12 ( $\mu$ m) and a stripe interval of 6 ( $\mu$ m) were grown on...this spinel substrate 11 to extend in a direction perpendicular to the ORF surface. The **stripe width** was 12 ( $\mu$ m), and the stripe interval was 6 ( $\mu$ m).

A quartz boat...two-layer structure. First selective growth masks made up of many SiO<sub>2</sub>) stripes having a **stripe width** of 20 ( $\mu$ m) and a stripe interval of 5 ( $\mu$ m) were grown on...

...structure. Thereafter, first selective growth masks 13 made up of many SiO<sub>2</sub>) stripes having a **stripe width** of 25 ( $\mu$ m) and a stripe interval of 5 ( $\mu$ m) were grown on...

...m thick second selective growth masks made up of silicon dioxide stripes, each having a **stripe width** of 15 ( $\mu$ m), were formed at positions corresponding to the window portions of the...the underlayer 12. Selective growth masks 13 made up of many SiO<sub>2</sub>) stripes having a **stripe width** of 20 ( $\mu$ m) and a stripe interval (width of each window) of 5 ( $\mu$ m)...1, and first selective growth masks 13 made up of many SiO<sub>2</sub>) stripes having a **stripe width** of 10 ( $\mu$ m) and a stripe interval (window 14) of 5 ( $\mu$ m) were...m thick first selective growth masks 13 made up of many SiO<sub>2</sub>) stripes having a **stripe width** of 10 ( $\mu$ m) and a stripe interval of 3 ( $\mu$ m) were formed on...layer 218 were etched by using the RIE apparatus to provide a ridge having a **stripe width** of 4 ( $\mu$ m). A p-side electrode 220 having a two-layer structure made...on the resultant structure in the same manner as in Example 10 except that the **stripe width** was 10 ( $\mu$ m) and the stripe interval was 5 ( $\mu$ m).

This wafer was...m thick first selective growth masks 13 made up of many SiO<sub>2</sub>) stripes having a **stripe width** of 10 ( $\mu$ m) and a stripe interval of 2 ( $\mu$ m) were formed on...

...and the p-side cladding layer 218 were etched to provide a ridge having a **stripe width** of 4 ( $\mu$ m) by using the RIE apparatus. At this time, ridge stripes were...m thick first selective growth masks 13 made up of many SiO<sub>2</sub>) stripes having a **stripe width** of 10 ( $\mu$ m) and a stripe interval of 2 ( $\mu$ m) were formed on...on the GaN layer 71, and 1-( $\mu$ m) thick silicon dioxide stripes having a **stripe width** of 15 ( $\mu$ m) and a stripe interval of 3 ( $\mu$ m) were formed by...

11/3,K/6 (Item 6 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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00975695

**NITRIDE SEMICONDUCTOR DEVICE**  
**HALBLEITERANORDNUNG AUS EINER NITRIDVERBINDUNG**  
**DISPOSITIF A SEMI-CONDUCTEUR AU NITRURE**

**PATENT ASSIGNEE:**

NICHIA CHEMICAL INDUSTRIES, LTD., (1569971), 491-100, Oka, Kaminakacho,  
Anan-shi, Tokushima 774-8601, (JP), (Applicant designated States: all)

**INVENTOR:**

NAGAHAMA, Shinichi, Nichia Chemical Ind., Ltd., 491-100, Oka, Kaminakacho  
, Anan-shi, Tokushima 774, (JP)

SENOH, Masayuki, Nichia Chemical Industries, Ltd., 491-100, Oka,  
Kaminakacho, Anan-shi, Tokushima 774, (JP)

**NAKAMURA, Shuji, Nichia Chemical Industries, Ltd. , 491-100, Oka,**  
Kaminakacho, Anan-shi, Tokushima 774, (JP)

**LEGAL REPRESENTATIVE:**

OK pat AG (101251), Chamerstrasse 50, 6300 Zug, (CH)

PATENT (CC, No, Kind, Date): EP 1017113 A1 000705 (Basic)  
WO 9831055 980716

APPLICATION (CC, No, Date): EP 98900171 980108; WO 98JP25 980108

PRIORITY (CC, No, Date): JP 971937 970109; JP 9712707 970127; JP 97102793  
970403; JP 97134210 970526; JP 97244342 970909; JP 97274438 971007; JP  
97311272 971027

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

INTERNATIONAL PATENT CLASS (V7): H01L-033/00; H01S-003/18

ABSTRACT WORD COUNT: 95

**NOTE:**

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; Japanese

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200027	3816
SPEC A	(English)	200027	36342
Total word count - document A			40158
Total word count - document B			0
Total word count - documents A + B			40158

**INVENTOR:**

... JP)

**NAKAMURA, Shuji, Nichia Chemical Industries, Ltd ...**

...SPECIFICATION cladding layer are etched with the RIE apparatus to form a ridge geometry having a **stripe width** of 4 (mu)m, as shown in Fig. 9. When the ridge stripe is formed...layer 19 were etched with RIE apparatus to make them a ridge geometry having a **stripe width** of 4 (mu)m.

Next, a mask was formed on the surface of the ridge...layer 20 and p-side cladding layer were etched into a ridge-geometry with a **stripe width** of 4 (mu)m with the RIE apparatus.

Next, in the same manner as in...side cladding layer 19 were etched with RIE apparatus into a ridge geometry with a **stripe width** of 4 (mu)m. Thus, since the layers above the active layer were made to...layer 20 and p-side cladding layer were etched into a ridge geometry with a **stripe width** of 4 (mu)m.



After forming a ridge, a stripe p-electrode 21 consisting of...layer and the p-side cladding layer were etched into a ridge geometry with a **stripe width** of 4 ( $\mu$ m). Thus, the layers above the active layer had a stripe ridge...layer and the p-side cladding layer 317 were etched into a ridge having a **stripe width** of 4 ( $\mu$ m), as shown in Fig. 9, with a RIE apparatus. When the...

11/3,K/7 (Item 7 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00858462

**Electro-absorption optical modulator**  
**Elektroabsorptionsmodulator**  
**Modulateur du type a electro-absorption**

PATENT ASSIGNEE:

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216883), 1006, Oaza-Kadoma,  
Kadoma-shi, Osaka 571-8501, (JP), (Proprietor designated states: all)

INVENTOR:

**Nakamura, Shinji** , 1-4-14, Asukano-minami, Ikoma-shi, Nara-ken, (JP)  
Kamiyama, Satoshi, 5-4-3-905, Hazamagaoka, Sanda-shi, Hyogo-ken, (JP)  
Matsuda, Kenichi, 3-11-15-717, Yagumokita-machi, Moriguchi-shi, Osaka,  
(JP)

Matsui, Yasushi, 8-23, Kansozuka-cho, Neyagawa-shi, Osaka, (JP)

LEGAL REPRESENTATIVE:

Kugele, Bernhard et al (51541), NOVAPAT INTERNATIONAL SA, 9, Rue du  
Valais, 1202 Geneve, (CH)

PATENT (CC, No, Kind, Date): EP 790521 A1 970820 (Basic)  
EP 790521 B1 010816

APPLICATION (CC, No, Date): EP 97102201 970212;

PRIORITY (CC, No, Date): JP 9624952 960213

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS (V7): G02F-001/015

NOTE:

Figure number on first page: 3A 3B

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199708W3	594
CLAIMS B	(English)	200133	592
CLAIMS B	(German)	200133	555
CLAIMS B	(French)	200133	674
SPEC A	(English)	199708W3	5006
SPEC B	(English)	200133	5115
Total word count - document A			5601
Total word count - document B			6936
Total word count - documents A + B			12537

INVENTOR:

**Nakamura, Shinji** ...

...SPECIFICATION and/or an impurity concentration of the semiconductor layers, a shape of the waveguide, the **stripe width** of the ridge portion, or the like) may be offset from the intended design value...

...SPECIFICATION and/or an impurity concentration of the semiconductor layers, a shape of the waveguide, the **stripe width** of the ridge portion, or the like) may be offset from the intended design value...

13/3,K/1 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2006 European Patent Office. All rts. reserv.

02025061

Method of manufacturing magnetic heads with reference and monitoring  
lapping guides

Herstellungsverfahren fur Magnetkopfe mittels Referenz- und  
Überwachungseinschleifführung

Procede de fabrication de tetes magnetiques utilisant des guides de rodage  
de reference et de controle

PATENT ASSIGNEE:

QUANTUM CORPORATION, (567674), 1650 Technology Drive, Suite 800, San  
Jose, California 95110, (US), (Applicant designated States: all)

INVENTOR:

Wu, Andrew L., 15 High Street, Shrewsbury Massachusetts 01545, (US)

LEGAL REPRESENTATIVE:

Charig, Raymond Julian (79692), Eric Potter Clarkson, Park View House, 58  
The Ropewalk, Nottingham NG1 5DD, (GB)

PATENT (CC, No, Kind, Date): EP 1626392 A1 060215 (Basic)

APPLICATION (CC, No, Date): EP 2005255020 050812;

PRIORITY (CC, No, Date): US 917782 040813

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
HU; IE; IS; IT; LI; LT; LU; LV; MC; NL; PL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; BA; HR; MK; YU

INTERNATIONAL CLASSIFICATION (V8 + ATTRIBUTES):

IPC + Level Value Position Status Version Action Source Office:

G11B-0005/31 A I F B 20060101 20051128 H EP

G11B-0005/39 A I L B 20060101 20051128 H EP

B24B-0049/04 A I L B 20060101 20051128 H EP

B24B-0049/05 A I L B 20060101 20051128 H EP

NOTE:

Figure number on first page: 4b

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	200607	796
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SPEC A	(English)	200607	4595
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Total word count - document A	5391
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Total word count - document B	0
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Total word count - documents A + B	5391
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INTERNATIONAL CLASSIFICATION (V8 + ATTRIBUTES):

IPC + Level Value Position Status Version Action Source Office:

G11B-0005/31 A I F B 20060101 20051128 H EP...

... G11B-0005/39 A I L B 20060101 20051128 H EP

...SPECIFICATION of a cluster of MR devices. The ELGs are monitored during  
manufacturing to determine the **stripe height** of the **active MR**  
devices of the cluster. For example, the lapping process is controlled to  
cease when the...

13/3,K/2 (Item 2 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2006 European Patent Office. All rts. reserv.

01675190

Flux guide in the bearing surface of a magnetoresistive head

**Flussleiter in der Lauffläche eines Magnetowiderstandkopfes**  
**Guide de flux dans la surface portante d'une tête magnétoresistive**

PATENT ASSIGNEE:

QUANTUM CORPORATION, (567673), 501 Sycamore Drive, Milpitas, CA 95035,  
(US), (Applicant designated States: all)

INVENTOR:

Wu, Andrew L., 15 High Street, Shrewsbury, Massachusetts 01545, (US)

LEGAL REPRESENTATIVE:

Charig, Raymond Julian et al (79692), Eric Potter Clarkson, Park View  
House, 58 The Ropewalk, Nottingham NG1 5DD, (GB)

PATENT (CC, No, Kind, Date): EP 1376543 A2 040102 (Basic)  
EP 1376543 A3 050817

APPLICATION (CC, No, Date): EP 2003253992 030625;

PRIORITY (CC, No, Date): US 183329 020625

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS (V7): G11B-005/39 ; G11B-005/31 ; H01L-043/00;  
H01F-010/32

ABSTRACT WORD COUNT: 39

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200401	307
SPEC A	(English)	200401	3365
Total word count - document A			3672
Total word count - document B			0
Total word count - documents A + B			3672

INTERNATIONAL PATENT CLASS (V7): G11B-005/39 ...

... G11B-005/31

...SPECIFICATION CoFe and the AFM exchange materials, being exposed on the TBS. It also allows the **GMR element stripe height** to be defined by high precision photolithographic techniques as opposed to the less controllable mechanical...

...surface of the GMR film is not etched but instead lapped to achieve a desired **GMR element stripe height**. It is critical to accurately control the size of the GMR element during the lapping...

...materials typically encountered on the tape bearing surface in contact with the magnetic tape. The **GMR element stripe height**, indicated by the reference numeral 180, is the NiFe height defined by the back side ...

13/3,K/3 (Item 3 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01652100

Variable width flat magnetic-tape head for bi-directional contact recording  
and method for making the same

Flachmagnetbandkopf mit variabler Breite für bi-direktionale Aufnahme und  
Verfahren dieses herzustellen

Tête plane pour bande magnétique à largeur variable pour enregistrement

**bi-directionel et methode de fabrication pour celle ci**

**PATENT ASSIGNEE:**

QUANTUM CORPORATION, (567673), 501 Sycamore Drive, Milpitas, CA 95035,  
(US), (Applicant designated States: all)

**INVENTOR:**

Kaiser, Donna Jean, 13 Angel Road, North Reading, Massachusetts  
01864-2902, (US)

Kennedy, James, 226 Boston Road, Palmer, Massachusetts 01069, (US)

**LEGAL REPRESENTATIVE:**

Charig, Raymond Julian et al (79692), Eric Potter Clarkson, Park View  
House, 58 The Ropewalk, Nottingham NG1 5DD, (GB)

PATENT (CC, No, Kind, Date): EP 1359577 A2 031105 (Basic)

APPLICATION (CC, No, Date): EP 2003252370 030414;

PRIORITY (CC, No, Date): US 128100 020423

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS (V7): **G11B-015/62**

ABSTRACT WORD COUNT: 184

**NOTE:**

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200345	383
SPEC A	(English)	200345	5483
Total word count - document A			5866
Total word count - document B			0
Total word count - documents A + B			5866

INTERNATIONAL PATENT CLASS (V7): **G11B-015/62**

...ABSTRACT simpler and less costly to manufacture than comparable devices with distinct advantages to the magnetoresistive (" MR ") read **element stripe height** control process, device alignment and assembly processes particularly with respect to traditionally contoured tape heads...

...SPECIFICATION its simplicity of fabrication and the elimination of many traditionally used processing operations. The magnetoresistive (" MR ") read **element stripe height** may be controlled with a single operation (flat lapping) rather than the multiple steps required...

...is simpler and less costly to manufacture than comparable devices with distinct advantages to the MR read **element stripe height** control process, device alignment and assembly processes, particularly with respect to traditionally contoured tape heads...

13/3,K/4 (Item 4 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2006 European Patent Office. All rts. reserv.

01017403

Method and system for making magnetic recording servo tracks with inherent dropout robustness and with encoded track set information, longitudinal position info

Methode und System zur Herstellung von Magnetaufzeichnungsservospuren mit inharenter Robustheit gegen Ausfälle und mit während der Band- oder Plattenherstellung

**Methode et systeme pour faire des pistes d'asservissement a enregistrement magnetique avec resistance inherente a la perte de signal et avec de l'information en**

**PATENT ASSIGNEE:**

Tandberg Data ASA, (465945), Kjelsasveien 161, 0884 Oslo, (NO),  
(applicant designated states:  
AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

**INVENTOR:**

Pahr, Per Olaf, Fjellstien 3B, 3400 Lier, (NO)

**LEGAL REPRESENTATIVE:**

Tonhardt, Marion, Dr. et al (69411), Forrester & Boehmert,  
Franz-Joseph-Strasse 38, 80801 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 911813 A1 990428 (Basic)

APPLICATION (CC, No, Date): EP 98109848 980529;

PRIORITY (CC, No, Date): US 956115 971024

DESIGNATED STATES: DE

INTERNATIONAL PATENT CLASS (V7): G11B-005/584 ; G11B-005/55 ;

G11B-015/087 ; G11B-023/36 ; G11B-027/28

ABSTRACT WORD COUNT: 101

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9917	651
SPEC A	(English)	9917	4960
Total word count - document A			5611
Total word count - document B			0
Total word count - documents A + B			5611

INTERNATIONAL PATENT CLASS (V7): G11B-005/584 ...

... G11B-005/55 ...

... G11B-015/087 ...

... G11B-023/36 ...

... G11B-027/28

...SPECIFICATION shown, for example, in Figure 3 of Robert E. Fontana et al. "Submicron Trackwidth and **Stripe Height MR Sensor** Test Structures" (IEEE Transactions on Magnetics, Vol. 32, No. 5, Sept. 1996, pp. 3340-3442...

13/3,K/5 (Item 5 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2006 European Patent Office. All rts. reserv.

00873897

**Giant magnetoresistive transducer with increased output signal**

**Riesenmagnetoresistive Wandler mit erhohetem Ausgangssignal**

**Transducteurs a effet magnetoresistif geant avec un signal de sortie augmente**

**PATENT ASSIGNEE:**

READ-RITE CORPORATION, (824840), 345 Los Coches Street, Milpitas  
California 95035, (US), (applicant designated states: DE;NL)

**INVENTOR:**

Yuan, Samuel W., 160, Oaks View Drive, San Carlos, California 94070, (US)

**LEGAL REPRESENTATIVE:**

Korber, Wolfhart, Dr. rer.nat. et al (44475), Patentanwalte Mitscherlich

& Partner, Sonnenstrasse 33, 80331 Munchen, (DE)  
PATENT (CC, No, Kind, Date): EP 801380 A2 971015 (Basic)  
EP 801380 A3 980304  
APPLICATION (CC, No, Date): EP 97104983 970324;  
PRIORITY (CC, No, Date): US 629993 960410  
DESIGNATED STATES: DE; NL  
INTERNATIONAL PATENT CLASS (V7): G11B-005/39  
ABSTRACT WORD COUNT: 86  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:  
Available Text Language Update Word Count  
CLAIMS A (English) 9710W2 197  
SPEC A (English) 9710W2 1865  
Total word count - document A 2062  
Total word count - document B 0  
Total word count - documents A + B 2062

INTERNATIONAL PATENT CLASS (V7): G11B-005/39

...SPECIFICATION when the sensor height is comparable to the transmission line decay length.

In the CPP/ GMR mode, the " active " GMR stripe height is defined by the contact leads. Therefore, the following situation results when the sensor height...

13/3,K/6 (Item 6 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2006 European Patent Office. All rts. reserv.

00839468

Longitudinally biased magnetoresistive sensor having a concave shaped active region to reduce Barkhausen noise by achieving a substantially single magnetic domain

Longitudinal vorgespannter magnetoresistiver Sensor mit konkav geformtem Aktivgebiet zur Reduzierung von Barkhausen-Gerausch durch Erreichen eines im wesentlichen

Detecteur magnetoresistif polarise longitudinalement comportant une region active de forme concave pour reduire le bruit de Barkhausen en etablissant un etat ma

PATENT ASSIGNEE:

QUANTUM CORPORATION, (567671), 500 McCarthy Boulevard, Milpitas  
California 95035, (US), (applicant designated states: DE;FR;GB;IT;NL)

INVENTOR:

Mallory, Michael L., 113 Boylston Rd., Berlin, Massachusetts 01503, (US)

LEGAL REPRESENTATIVE:

Goodman, Christopher (31122), Eric Potter Clarkson, Park View House, 58  
The Ropewalk, Nottingham NG1 5DD, (GB)

PATENT (CC, No, Kind, Date): EP 777214 A2 970604 (Basic)  
EP 777214 A3 981111

APPLICATION (CC, No, Date): EP 96308390 961120;

PRIORITY (CC, No, Date): US 565032 951130

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS (V7): G11B-005/39 ; G11B-005/012

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text Language Update Word Count  
CLAIMS A (English) EPAB97 1590  
SPEC A (English) EPAB97 6632  
Total word count - document A 8222

Total word count - document B 0  
Total word count - documents A + B 8222

INTERNATIONAL PATENT CLASS (V7): G11B-005/39 ...

... G11B-005/012

...SPECIFICATION In a preferred embodiment, a substantially constant effective longitudinal bias field is obtained throughout the **active MR element** if the **stripe height** increases as an exponential function of the square of the off-track distance.

In a...distance ARMAX)) along the central longitudinal axis and ABMIN)) at the edge portions of the **MR sensor** 80. The **stripe height** of the active region is substantially SH2)) over the length ARMIN)) and lesser out toward...

13/3,K/7 (Item 7 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2006 European Patent Office. All rts. reserv.

00724907

Giant magnetoresistive reproduce head.  
Riesenmagnetoresistiven Wiedergabekopf.  
Tete de reproduction a magnetoresistance geant.

PATENT ASSIGNEE:

EASTMAN KODAK COMPANY, (201214), 343 State Street, Rochester, New York  
14650-2201, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Smith, Neil, c/o Eastman Kodak Co., Patent Legal Staff, 343 State Street,  
Rochester, New York 14650-2201, (US)

LEGAL REPRESENTATIVE:

Weber, Etienne Nicolas et al (91684), Kodak Industrie, Departement  
Brevets, CRT, Zone Industrielle, 71102 Chalon sur Saone Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 684484 A2 951129 (Basic)  
EP 684484 A3 960110

APPLICATION (CC, No, Date): EP 95420129 950512;

PRIORITY (CC, No, Date): US 248772 940525

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS (V7): G01R-033/09; G11B-005/39

ABSTRACT WORD COUNT: 166

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	930
SPEC A	(English)	EPAB95	6087
Total word count - document A			7017
Total word count - document B			0
Total word count - documents A + B			7017

...INTERNATIONAL PATENT CLASS (V7): G11B-005/39

...SPECIFICATION that of the interior magnetic layer 20 thickness t. For high density reproduce heads, the **stripe height** L of the **GMR -DMR sensor** structure 10 is about 1 micron.

Magnetic layers 16, 18, 20, are generally deposited in...

13/3,K/8 (Item 8 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2006 European Patent Office. All rts. reserv.

00690133

**Individual MR transducer head/disk/channel adaptive bias current system**  
**Adaptives Vormagnetisierungssystem fur Individual- MR-Wandlerkopf/-Platte/-**  
**Kanal**

**Systeme a courant de premagnetisation adaptatif pour transducteurs MR**  
**tete/disque/canal individuels**

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (Proprietor designated states: all)

INVENTOR:

Christner, Jodie Ann, 1135 Chippewa Drive N.W., Rochester, Minnesota  
55901, (US)

Cunningham, Earl A., 2429 13th Avenue N.W., Rochester, Minnesota 55901,  
(US)

Kerwin, Gregory John, 6405 50th Avenue N.W., Rochester, Minnesota 55901,  
(US)

Poss, Joe Martin, 4901 Countrywood Drive S.E., Rochester, Minnesota 55904  
, (US)

LEGAL REPRESENTATIVE:

de Pena, Alain (15151), Compagnie IBM France Departement de Propriete  
Intellectuelle, 06610 La Gaude, (FR)

PATENT (CC, No, Kind, Date): EP 658879 A2 950621 (Basic)

EP 658879 A3 951102

EP 658879 B1 011031

APPLICATION (CC, No, Date): EP 94480137 941115;

PRIORITY (CC, No, Date): US 168630 931216

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS (V7): **G11B-005/035 ; G11B-005/02 ;**

**G11B-005/012 ; G11B-019/02**

ABSTRACT WORD COUNT: 152

NOTE:

Figure number on first page: 3

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	EPAB95	836
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CLAIMS B	(English)	200144	745
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CLAIMS B	(German)	200144	662
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CLAIMS B	(French)	200144	902
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SPEC A	(English)	EPAB95	4191
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SPEC B	(English)	200144	4224
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Total word count - document A	5028
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Total word count - document B	6533
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Total word count - documents A + B	11561
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INTERNATIONAL PATENT CLASS (V7): **G11B-005/035 ...**

**... G11B-005/02 ...**

**... G11B-005/012 ...**

**... G11B-019/02**

**...SPECIFICATION** temperature and current density compound and cause a much  
shorter life expectancy for the low **stripe height** and thin **MR**  
**elements** , compared to the higher and thicker elements.

Another consideration is that all the factors that...



...SPECIFICATION temperature and current density compound and cause a much shorter life expectancy for the low **stripe height** and thin **MR elements** , compared to the higher and thicker elements.  
Another consideration is that all the factors that...

13/3,K/9 (Item 9 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2006 European Patent Office. All rts. reserv.

00599450

**Amplifier for magnetoresistive sensor**  
**Verstärker für einen magnetoresistiven Sensor**  
**Amplificateur pour un capteur magnetoresistif**  
PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Jove, Stephen Alan, P O Box 456, Watsonville, 95077-0456, (US)  
Klaassen, Klaas Berend, 7171 Anjou Creek Circle, San Jose, California  
95120, (US)

van Peppen, Jacobus Cornelis Leonardus, 841 Portswood Circle, San Jose,  
California 95120, (US)

LEGAL REPRESENTATIVE:

Burt, Roger James, Dr. (52152), IBM United Kingdom Limited Intellectual  
Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 586062 A1 940309 (Basic)  
EP 586062 B1 980225

APPLICATION (CC, No, Date): EP 93305533 930714;

PRIORITY (CC, No, Date): US 914278 920715

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS (V7): G11B-005/02 ; G11B-020/24 ; G01R-033/06

ABSTRACT WORD COUNT: 125

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9809	698
CLAIMS B	(German)	9809	678
CLAIMS B	(French)	9809	779
SPEC B	(English)	9809	3147
Total word count - document A			0
Total word count - document B			5302
Total word count - documents A + B			5302

INTERNATIONAL PATENT CLASS (V7): G11B-005/02 ...

... G11B-020/24

...SPECIFICATION Patent 4,706,138, to render the amplifier output signal relatively insensitive to variations in **stripe height** of the **MR sensors** ; and

(8) Use, with a single-ended amplifier, of a disk enclosure as a Faraday...conductive substrate of disk D are grounded to minimize transient conductive asperity currents between a **striped portion** (not shown) of **MR element** Rmr and an air bearing surface of the associated disk D with protruding conductive asperities...Vout of the amplifier circuit relatively insensitive to variations in signal due to variations in **stripe height** of the **MR element** .

It will be apparent to one skilled in the art that notwithstanding embodiments of the...

...CLAIMS and the conductive substrate are grounded to substantially minimise transient conductive asperity current between a **striped portion** of the **MR element** and the recording surface.  
8. A magnetic storage system as claimed in claim 7 further...

13/3,K/10 (Item 10 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2006 European Patent Office. All rts. reserv.

00536660

Process for controlling the manufacture of magnetic recording heads using lapping guides.

Verfahren zur Steuerung des Lappens von Aufzeichnungsmagnetköpfen mittels Lappungsführung.

Procede de commande de fabrication de tetes magnetiques d'enregistrement utilisant des guides de rodage.

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Zammit, Robert Paul, 4558 North Rockcliff Road, Tucson, Arizona 85715, (US)

LEGAL REPRESENTATIVE:

Burt, Roger James, Dr. (52152), IBM United Kingdom Limited Intellectual Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 500230 A2 920826 (Basic)  
EP 500230 A3 930113

APPLICATION (CC, No, Date): EP 92300920 920204;

PRIORITY (CC, No, Date): US 656666 910219

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS (V7): G11B-005/31 ; G11B-005/39

ABSTRACT WORD COUNT: 173

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	585
SPEC A	(English)	EPABF1	5194
Total word count - document A			5779
Total word count - document B			0
Total word count - documents A + B			5779

INTERNATIONAL PATENT CLASS (V7): G11B-005/31 ...

... G11B-005/39

...SPECIFICATION the invention. For instance, the present invention is preferable for use in determining the required **stripe height** of **MR read elements** in magnetic heads for use with tape media. It should be understood that other uses...

13/3,K/11 (Item 11 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2006 European Patent Office. All rts. reserv.

00206445

**A magnetoresistive read transducer assembly.**

**Zusammensetzung eines magnetoresistiven Lesewandlers.**

**Assemblage de transducteur de lecture magnetoresistif.**

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Huang, Shiezen, 6946 Randol Creek Drive, San Jose, Cal. 95120, (US)

Voegeli, Otto, 13465 Sycamore Avenue, Morgan Hill, Cal. 95037, (US)

LEGAL REPRESENTATIVE:

Hobbs, Francis John (31881), IBM United Kingdom Limited Intellectual

Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 211445 A1 870225 (Basic)

EP 211445 B1 900725

APPLICATION (CC, No, Date): EP 86110983 860808;

PRIORITY (CC, No, Date): US 765999 850815

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS (V7): **G11B-005/39**

ABSTRACT WORD COUNT: 72

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPABF1	242
SPEC B	(English)	EPABF1	2642
Total word count - document A			0
Total word count - document B			2884
Total word count - documents A + B			2884

INTERNATIONAL PATENT CLASS (V7): **G11B-005/39**

...SPECIFICATION Figure 6 and having the following dimensions, and this sensor had suitable performance characteristics. The **sensor** has an **MR stripe height** of 10 (mu)m, and comb extensions that are 50 (mu)m long, and 2...

**13/3,K/12 (Item 12 from file: 348)**

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2006 European Patent Office. All rts. reserv.

00206271

**Method and apparatus for reading recorded data by a magnetoresistive head.**

**Verfahren und Gerat zum Ablesen aufgezeichneter Daten mit einem magnetoresistiven Kopf.**

**Procede et appareil de lecture au moyen d'une tete magnetoresistive de donnees enregistrees.**

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

Klaassen, Klaas Berend, 7171 Anjou Circle, San Jose CA 95120, (US)

LEGAL REPRESENTATIVE:

Burt, Roger James, Dr. (52152), IBM United Kingdom Limited Intellectual

Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 215270 A1 870325 (Basic)

EP 215270 B1 921230

APPLICATION (CC, No, Date): EP 86110796 860805;

PRIORITY (CC, No, Date): US 767549 850820

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS (V7): **G11B-005/39**  
ABSTRACT WORD COUNT: 70

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	965
CLAIMS B	(German)	EPBBF1	971
CLAIMS B	(French)	EPBBF1	1095
SPEC B	(English)	EPBBF1	2940
Total word count - document A			0
Total word count - document B			5971
Total word count - documents A + B			5971

INTERNATIONAL PATENT CLASS (V7): **G11B-005/39**

...SPECIFICATION recording applications. Since both R( sub(h)) and, more importantly, R( sub(h)) are proportional to **stripe height** prior art preamplifiers which detect V( sub(s)) of equation (A) provide different sensistivity if...

**13/3,K/13 (Item 1 from file: 349)**  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00873008 \*\*Image available\*\*

**PROCESS AND APPARATUS FOR FINISHING A MAGNETIC SLIDER**

**PROCEDE ET APPAREIL DE FINITION D'UN PLAN PORTEUR DE TETE MAGNETIQUE**

Patent Applicant/Assignee:

SEAGATE TECHNOLOGY LLC, 920 Disc Drive, Scotts Valley, CA 95066, US, US  
(Residence), US (Nationality)

Inventor(s):

BOUTAGHOU Zine-Eddine, 307 Lily Pond Lane, Vadnais Heights, MN 55127, US,

Legal Representative:

BOHN David C (et al) (agent), Westman, Champlin & Kelly, P.A., Suite 1600  
- International Centre, 900 Second Avenue South, Minneapolis, MN  
55402-3319, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200207154 A2-A3 20020124 (WO 0207154)  
Application: WO 2001US21561 20010709 (PCT/WO US0121561)  
Priority Application: US 2000218262 20000713

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE  
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM  
TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 3121

Main International Patent Class (v7): **G11B-005/10**  
International Patent Class (v7): **G11B-005/187 ...**

... G11B-005/31 ...

... G11B-005/39

Fulltext Availability:

Detailed Description

Detailed Description

... row of multiple read/write heads. The bars are then lapped to adjust an average **stripe height** (SH) of magnetoresistive ( **MR** ) **transducers** in the bar, the average throat height (TH) of inductive transducer in the bar, or...

13/3,K/14 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00734850 \*\*Image available\*\*

METHOD FOR CONTROLLING BIAS CURRENT FOR MAGNETORESISTIVE HEAD, FIXED MAGNETIC RECORDING DEVICE, AND MAGNETIC DISC THEREFOR  
PROCEDE DE COMMANDE DU COURANT DE POLARISATION POUR TETE A MAGNETORESISTANCE, DISPOSITIF D'ENREGISTREMENT MAGNETIQUE FIXE ET DISQUE MAGNETIQUE AFFERENT

Patent Applicant/Assignee:

MATSUSHITA ELECTRIC INDUSTRIAL CO LTD, 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501, JP, JP (Residence), JP (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

KADOKAWA Kouichi, 2-7-133, Shinonomecho, Niihama-shi, Ehime 792-0864, JP, JP (Residence), JP (Nationality), (Designated only for: US)

Legal Representative:

MORIMOTO Yoshihiro, All Nippon Airways(Nishi-Hommachi)bldg., 4th Floor, 10-10, Nishi-Hommachi 1-chome, Nishi-ku, Osaka-shi, Osaka 550-0005, JP

Patent and Priority Information (Country, Number, Date):

Patent: WO 200048173 A1 20000817 (WO 0048173)

Application: WO 2000JP770 20000214 (PCT/WO JP0000770)

Priority Application: JP 9935100 19990215

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

CN ID KR SG US

Publication Language: English

Filing Language: English

Fulltext Word Count: 11642

Main International Patent Class (v7): G11B-005/02

International Patent Class (v7): G11B-005/012 ...

... G11B-019/02 ...

... G11B-019/04

Fulltext Availability:

Detailed Description

Detailed Description

... Thus, temperature and current density compound and cause a much shorter life expectancy for low- **stripe - height** and thin **MR elements** , compared to higher and thicker elements.

Another consideration is that all the factors that make...

13/3,K/15 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2006 WIPO/Univentio. All rts. reserv.

00541177 \*\*Image available\*\*

**METHOD AND APPARATUS FOR BIASING A MAGNETORESISTIVE HEAD WITH CONSTANT  
POWER DISSIPATION**  
**PROCEDE ET APPAREIL UTILES POUR POLARISER UNE TETE MAGNETORESISTANTE AVEC  
UNE DISSIPATION DE PUISSANCE CONSTANTE**

Patent Applicant/Assignee:

SEAGATE TECHNOLOGY INC, 920 Disc Drive, Scotts Valley, CA 95066, US, US  
(Residence), US (Nationality)

Inventor(s):

IONESCU Stefan A, 19405 Oak Ridge Court West, Burnsville, MN 55306, US,  
RUB Bernardo, 6608 Scandia Road, Edina, MN 55439, US,

Legal Representative:

WIBERG John A (agent), Westman, Champlin & Kelly, P.A., Suite 1600 -  
International Centre, 900 Second Avenue South, Minneapolis, MN  
55402-3319 (et al), US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200004550 A2-A3 20000127 (WO 0004550)  
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Detailed Description

Detailed Description

... MR head with a relatively short stripe height will  
have a higher resistance than an MR head having a taller stripe  
height  
and will therefor dissipate more power. The MR head having the  
shorter  
stripe height will therefor operate at a higher temperature than the  
MR  
head having the taller stripe height . Product life is inversely  
related to  
operating temperature. Thus the life expectancy for the low stripe  
height and thin MR elements is much shorter than for the higher and  
thicker MR elements. Thus, in a disc...

13/3,K/16 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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**MAGNETORESISTIVE HEAD WITH INTEGRATED BIAS AND MAGNETIC SHIELD LAYER**  
**TETE DE LECTURE A RESISTANCE MAGNETIQUE, A COUCHE DE BLINDAGE MAGNETIQUE ET**

**DE POLARISATION INCORPORES**

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Detailed Description

Detailed Description

... away from that plane, which is in the range of one to ten times the **stripe height** of the **MR element**, thereby concentrating both the current passing through said electrically-conductive, magnetically-permeable layer and the...